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Injury Experience in the Nonmetallic Mineral Industries (Except Stone and Coal), 1970-71



UNITED STATES DEPARTMENT OF THE INTERIOR
Mining Enforcement and Safety Administration
Washington, D. C. 20240

Injury Experience in the Nonmetallic Mineral Industries (Except Stone and Coal), 1970-71

By Staff, Branch of Recurring Reports

Health and Safety Analysis Center, Denver, Colo.



UNITED STATES DEPARTMENT OF THE INTERIOR

Rogers C. B. Morton, Secretary

Mining Enforcement and Safety Administration

James M. Day, Administrator

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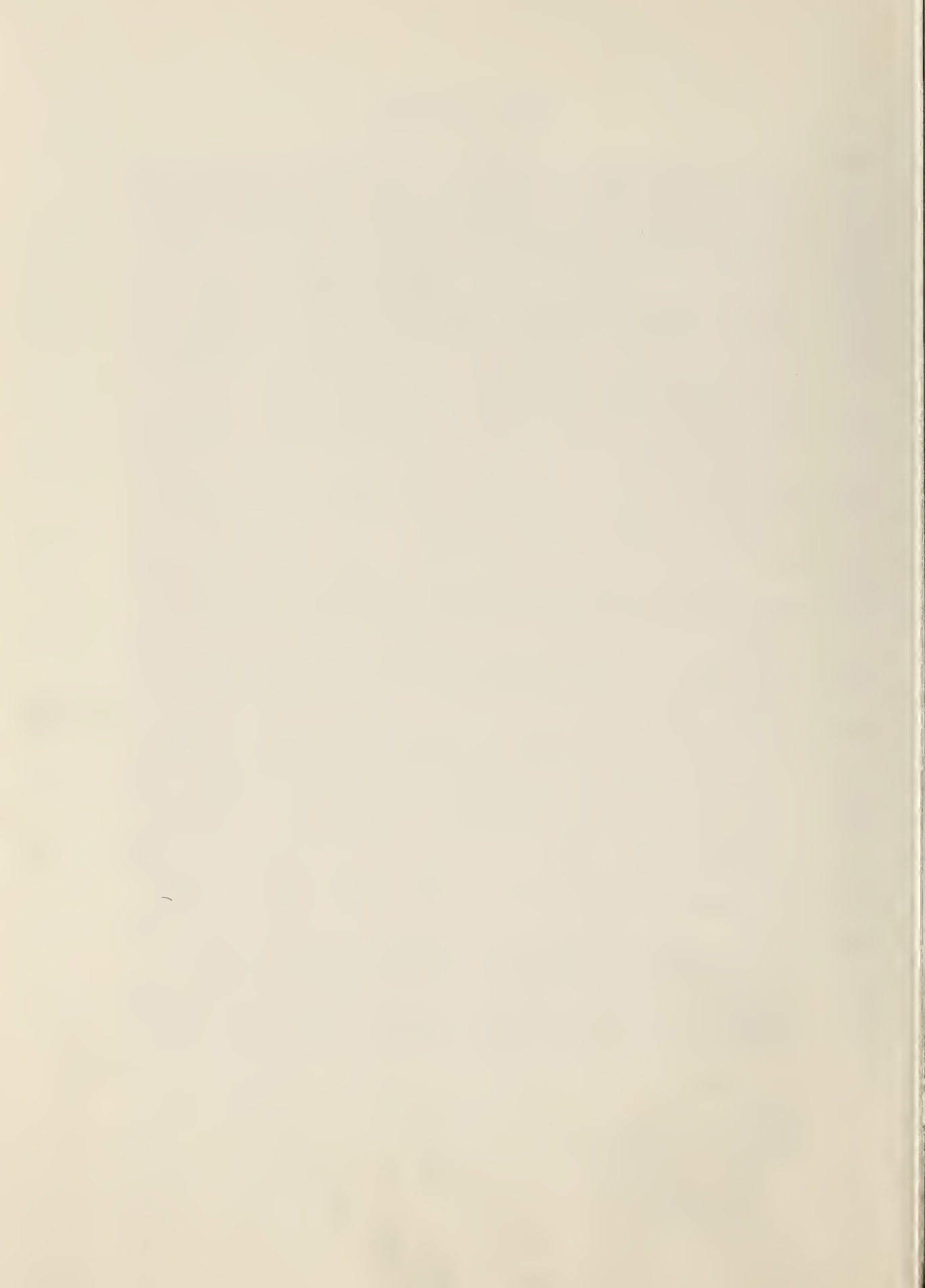
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INJURY EXPERIENCE IN THE NONMETALLIC MINERAL INDUSTRIES (EXCEPT STONE AND COAL), 1970-71

by

Staff, Branch of Recurring Reports
Health and Safety Analysis Center

ABSTRACT

This report reviews injury experience in the nonmetallic mineral industries (except stone and coal) for 1970-71. For 1970 there are 22 tables and for 1971 there are 21 tables which summarize disabling work injuries by department, source of injury, extent of disability, part of body injured, and nature of injury. Correlative information on employment, worktime, and operating activity also is presented.

INTRODUCTION

Under provisions of Section 13, Public Law 89-577 (Federal Metal and Nonmetallic Mine Safety Act), the Bureau of Mines collected injury and employment data for nonmetal mines and mills by a mandatory reporting system in 1970 and 1971. This Act required the operators of mines and/or mills subject to the Act to submit reports of accidents, injuries, and occupational diseases, and related data.

Mine and mill operators classified work injuries by department, source of injury, extent of disability, part of body injured, and nature of injury, as requested on the annual employment canvass form. From these data, personnel of the Health and Safety Analysis Center of the Mining Enforcement and Safety Administration (MESA) determined the appropriate injury classification and tabulated the injuries by common factors. The relative prevalence of injuries to the different parts of the body, the nature of the injury, and the relative severity of injuries are among summarized factors. Data pertaining to injury and employment statistics are contained in appendix A for 1970 and in appendix B for 1971. Appendix C is a sample of the canvass form used to collect these data.

ACKNOWLEDGMENTS

MESA acknowledges the cooperation of the operators of the nonmetal mines and mills who submitted data on injuries and related employment. This cooperation makes possible the compilation of industrywide information on injury experience to aid in the promotion of safe working habits and conditions.

SCOPE OF STATISTICS

The statistical data in this report cover the work experience of all personnel engaged in exploration, development, production, maintenance, repair, and force-account construction work, including supervisory and technical personnel and working partners. This report contains information on the sulfur industry for 1970 only, owing to the transfer to the Department of Labor of data-collection responsibilities for information on operations which produce minerals in liquid form from wells or by solar evaporation. Such operations include those producing sulfur by the Frasch process, salt by solution mining or solar evaporation, sodium and potassium compounds from dry lake beds, and others. The aforementioned transfer has affected comparability of the data for 1971 with those for previous years in varying degrees on the following subgroups of nonmetal industries: Potash, salt, sulfur, and miscellaneous. Comparability of the 1971 data on the miscellaneous nonmetal group was affected further by the inclusion of the injury and worktime data on the peat industry for the first time. This inclusion resulted from an administrative action which placed peat operations under the Federal Metal and Nonmetallic Mine Safety Act. Information concerning onsite offeworkers at nonmetal mines and mills appears separately and is presented only as mentioned specifically in table titles.

The compiled information is based on reports covering an annual average of 2,010 nonmetal mines and 886 mills in operation during all or part of 1970-71. Most of the information on nonmetal mines and mills was received directly from the operators. However, to obtain complete coverage of the industry, it was necessary to estimate injury and employment data for certain operations from information available from other sources.

The terminology used throughout this report is that generally used by the mineral-extractive industries and by the Bureau of Mines and MESA. The recording and measuring of work injury experience follows the U.S.A. Standard Method.¹ The classification and extent of industries is in close general agreement with the Standard Industrial Classification.²

DEFINITION OF TERMS

Key terms used in this publication series are defined or described as follows:

Disabling work injury.--Any injury suffered by a person that arises out of and in the course of his employment that results in death, permanent total disability, permanent partial disability, or temporary total disability.

¹United States of America Standards Institute (formerly the American Standards Association, Inc.). U.S.A. Standard Method of Recording and Measuring Work Injury Experience. Bull. Z16.1--1967, pp. 7-15.

²Executive Office of the President, Bureau of the Budget. Standard Industrial Classification Manual. 1957 revision.

Fatality.--Any death resulting from a disabling work injury, regardless of the time intervening between injury and death.

Permanent total disability.--Any disabling work injury other than death that permanently and totally incapacitates an employee from following any gainful occupation, or that results in the loss, or the complete loss of use, of both or any two: Hands, arms, legs, feet, or eyes.

Permanent partial disability.--Any disabling work injury other than death or permanent total disability that results in the loss, or the complete loss of use, of any member or part of a member of the body, or any permanent impairment of functions of the body or part thereof, regardless of any preexisting disability of the injured member or impaired body function.

Temporary total disability.--Any disabling work injury that does not result in death or permanent impairment, but which renders the injured person unable to perform a regularly established job that is open and available to him, during the entire time interval corresponding to the hours of his regular shift on any one or more days (including Sundays, days off, or plant shutdown) subsequent to the date of injury.

Lost time injury.--Same as disabling work injury.

Disabling injury-frequency rate.--The number of disabling work injuries per million man-hours of exposure. It is calculated by multiplying the total number of injuries by one million and dividing the product by the total man-hours of worktime.

Disabling injury-severity rate.--The number of days lost or charged from disabling work injuries per million man-hours of exposure. It is calculated by multiplying the total number of days lost or charged by one million and dividing the product by the total man-hours of worktime.

Average severity.--The average number of days lost or charged per disabling injury. It is calculated from the total number of days lost or charged divided by the total number of disabling injuries.

Days lost.--The number of full calendar days the injured employee was unable to work as the result of a temporary total disability.

Days charged.--All fatalities and permanent total disabilities have a standard time-loss charge of 6,000 days. Injuries resulting in permanent partial disability are assigned a time-loss charge depending upon the particular injury as specified by the U.S.A. Standard Table of Scheduled Charges.³

Men employed.--Average number of men at work each day the mine or plant was active for production or development. As absenteeism and labor turnover are considered, this number is lower than the number available for work as measured by a count of names on the payroll.

³Pp. 10-11 of work cited in footnote 1.

Underground mine.--An underground mining establishment separated into an underground department and a surface department which includes the associated supply, maintenance, repair, and yard facilities on the surface.

Open pit.--An open pit mining establishment including the pit and associated surface facilities.

Other surface mining.--Placer, dredging, hydraulicking, leaching, wells and brines, Frasch sulfur, and exploration establishments as well as stock-piles, mine dumps, and old tailings dumps worked for recovery of ore.

Mill.--An establishment processing ores and minerals by washing, screening, crushing, grinding, concentrating, or other means. The mill may be in conjunction with a mining operation or may be operated independently as a custom mill.

Accident-cause classification.--The cause classification used in this report has been developed by the Bureau of Mines through many years of analyzing descriptions of accidents which resulted in injuries at mineral extractive and processing operations. The classification descriptions are as follows:

Falls of roof or back.--Falls of ore or rock from their in-place location in the mine roof, back, overhead, or brow. Excludes falls of rock or ore caused by equipment knocking out support or falls from pressure bumps or bursts.

Falls of face or side.--Any fall of ore, rock, or waste from their in-place location in the face, wall, breast, side, rib, or pillar in underground workings and from the side, face, or wall in open pits. Excludes falls caused by equipment knocking out support or falls from pressure bumps or bursts.

Pressure bumps or bursts.--Falling or flying roof, back, face, or side material caused by pressure bumps or bursts.

Inrush of water or material.--Includes inrushes of water or unconsolidated material caused by mining into or too close to flooded old workings, natural subterranean cavities, etc., or unconsolidated sediments such as sand.

Other falling materials or objects.--Rolling, shifting, sliding, or falling materials or objects not being handled or disturbed by the injured worker. Includes ore or rock already broken from its in-place position.

Slips or falls of persons.--Slips or falls on the same level and from an elevation are grouped separately. Slips or falls in or from haulage equipment that resulted from an accident on haulage, from the motion of haulage equipment, or while getting on or off haulage equipment are excluded. Slips or falls into moving or operating machinery or into electrically generated equipment also are excluded.

Handling materials.--Injuries occurring while moving, lifting, loading, carrying, or installing ore, rock, supplies, or materials; and injuries from flying particles from materials being handled or moved.

Handtools.--Accidents from tools in hands of injured worker or of fellow worker, except power-driven tools. Includes flying pieces from tools being used.

Stepping or kneeling on sharp or loose objects.--Stepping or kneeling on sharp or loose objects, slips or falls from stepping on loose objects, and cases of bursitis or "miner's knee" resulting from working on hands and/or knees.

Striking or bumping against objects.--Cases of walking or bumping into stationary objects. Excludes cases of striking or bumping in the course of servicing and repairing equipment, handling materials, using handtools, operating machinery or haulage equipment, etc. Excludes cases of striking or bumping moving or operating machinery or electrically generated equipment.

Haulage.--Haulage accidents are divided into the following six groups: (1) mine cages, cars, or motors; (2) shuttle cars, transloaders, and small mobile trucks; (3) railroad cars and locomotives; (4) water transportation; (5) automobiles, gasoline or diesel trucks, tractors, etc.; and (6) miscellaneous equipment (ropes, animals, belts, etc.). Included in the haulage category are falls of roof, back, or face from equipment knocking out supports; slips or falls of persons resulting from haulage accidents, from the motion of the equipment, or while getting on or off equipment; and flying particles set in motion by haulage equipment or draft therefrom.

Explosions of gas or dust.--Explosions of gas or dust in the mine environment.

Explosives and breaking agents.--Cases in which the detonation, fumes, flying fragments, or improper use of the explosive or breaking agent, fuses, caps, or detonators was the cause of injury.

Electricity.--Cases resulting from contact with electric current or from arcs or flashes.

Machinery.--Accidents while operating machines are separated from those while moving or tramping a whole machine, except continuous mining machines. Injuries occurring while moving a repair part of a machine are classed under "handling materials." Included in the machinery classification are falls of roof or face caused by machinery knocking out support, setting-up or servicing machinery, and flying particles set in motion by machinery. Excluded from the classification are accidents occurring in the course of repairing machines, unless the accident resulted from in-motion machinery.

Suffocation.--Divided into suffocation (1) from naturally occurring gases from strata or processing gases, or from oxygen-depleted atmospheres, and (2) from foreign gases such as from oil or gasoline fumes, from gases and

smoke drawn underground from a surface fire, or from gas wells. Excludes gases from mine fires, explosions, and explosives use.

Mine fires and suffocation from fires.--Mine fire accidents are divided into (1) mine fires in which mineral or timber is burning, and (2) other fires in which equipment or material other than mineral or timber is burning.

Miscellaneous causes.--Includes flying particles from draft or wind; gas or burns from carbide; gas, burns, or flying materials or flashes from acetylene and electric welding and cutting; irritations and burns from battery fluid or other acids; burns from controlled wood, oil, or coal fires, steam, hot grease, oil, etc.; and all other accidents not elsewhere classified.

Occupational pneumoconiosis.--A chronic dust disease of the lungs, such as silicosis, caused by prolonged inhalation of occupational dusts, such as coal.

HISTORICAL INJURY EXPERIENCE IN THE NONMETALLIC MINERAL INDUSTRY

Statistical data on injuries and related employment at nonmetal mines first became available when the Bureau of Mines received reports from operating companies in 1911. The nonmetal mine data were published under the classification of miscellaneous mineral mines for the period 1911 to 1914 inclusive. In 1915, the classification was changed to nonmetallic mineral mines. From 1911 to 1914 inclusive, the Bureau's classification of nonfatal injuries covered two groups: "Serious" injuries, disabling a workman for more than 20 days; and "slight" injuries, causing disability not exceeding 20 days but longer than the remainder of the day of injury. From 1915 to 1929, a "serious" injury, as the term was used in Bureau reports, signified a temporary injury disabling an employee for more than 14 days. Beginning in 1930, temporary total injuries have been included in a single group, each injury causing disability for more than the remainder of the day on which the injury occurred. Nonfatal injuries are classified by severity of injuries as follows: Permanent total, permanent partial, and temporary total.

From 1911 through 1916, injury-frequency rates were indicated by showing the number of injuries per thousand men employed. Beginning in 1917 and continuing through 1930, a method was used whereby the total number of employees was converted to an equivalent number of 300-day workers, which was used to determine the injury rates per thousand 300-day workers.

Beginning in 1931, the Bureau of Mines collected and used the number of man-hours of exposure as the basis for determining injury-frequency rates. The injury-frequency rate per million man-hours worked constitutes an index which can be used for direct comparison of injury experience between different years, different mines, and different industries. The use of this index eliminates such effects as variations in the number of men working at different mines, the number of working days per year, and the number of working hours per day. Most of the operating companies report the number of man-hours worked, and that figure is generally accepted by the Bureau as the best record obtainable. In some instances, however, it has been necessary to approximate

the number of days on which the employees worked, and then multiply the product by the number of hours worked per day (length of working shift).

Published data for 1942 to 1944 inclusive were revised to include fluorspar operations with nonmetal mines. The clay industry, which includes all clay and shale operations, was included with the data on nonmetal mines beginning with 1955. Clay mills at the minesite were first included in the data for 1956.

In 1956 data on injury and employment experience in the nonmetal industries were separated from the former series of reports, "Injury Experience in the Metal and Nonmetal Industries," and were published in a new series, "Injury Experience in the Nonmetal Industries." Data on injury and employment experience at nonmetal mills were first compiled in 1956. At this time the Bureau of Mines requested the operators of all nonmetal mines to furnish a brief description of each disabling work injury and to report the number of days of disability experienced for each temporary total injury. With these data, injury-severity rates have been calculated for the nonmetal mining and milling industry in the United States beginning with 1956. Table 1 lists the scale of time charges for weighting deaths, permanent total disabilities, and permanent partial disabilities for computing severity of injuries.

Beginning in 1962, the activity classifications "Ore-dressing" and "Auxiliary works" were dropped, and the combined data on these activities were designated "Mills" and associated with the nonmetal mine data.

Injury and employment data for the nonmetallic mineral industries were collected on a voluntary basis from 1911 through 1961, and by a mandatory reporting system in 1962 under provisions of Public Law 87-300. During 1963-65 reporting was again on a voluntary basis while the various aspects of metal and nonmetal mine safety were studied. In 1966 reporting of injuries and employment data became mandatory under the provisions of Section 13, Public Law 89-577.

Table 1 gives the scale of time charges for injuries. Table 2 gives the salient statistics for 1967-71, and table 3 presents the injury experience and employment data on nonmetal mines and mills in the United States for 1931-71.

GENERAL INJURY EXPERIENCE, 1970-71

During 1970, the overall injury experience, excluding officeworkers, at 2,878 nonmetal mines and mills was 28 fatal and 2,394 nonfatal disabling work injuries. These injuries resulted in a combined fatal and nonfatal injury-frequency rate of 25.57 per million man-hours of exposure, consisting of a fatality rate of 0.30 and a nonfatal injury rate of 25.28. The combined injury-severity rate of 2,917 consisted of a fatal injury rate of 1,774 and a nonfatal injury rate of 1,143. The average severity of all injuries at nonmetal mines and mills was 114 days lost per disabling work injury. An average of 42,461 men worked daily in the nonmetallic mineral industry during 1970, accumulating approximately 94.7 million man-hours during the year.

During 1971, the overall injury experience, excluding officeworkers, at 2,912 nonmetal mines and mills was 24 fatal and 2,308 nonfatal disabling work injuries. These injuries resulted in a combined fatal and nonfatal injury-frequency rate of 27.67 per million man-hours of exposure, consisting of a fatal injury rate of 0.28 and a nonfatal injury rate of 27.39. The combined injury-severity rate of 2,989 consisted of a fatal injury rate of 1,709 and a nonfatal injury rate of 1,281. The average severity of all injuries at nonmetal mines and mills was 108 days lost per disabling work injury. An average of 38,389 men worked daily in the nonmetallic mineral industry during 1971, accumulating approximately 84.3 million man-hours during the year.

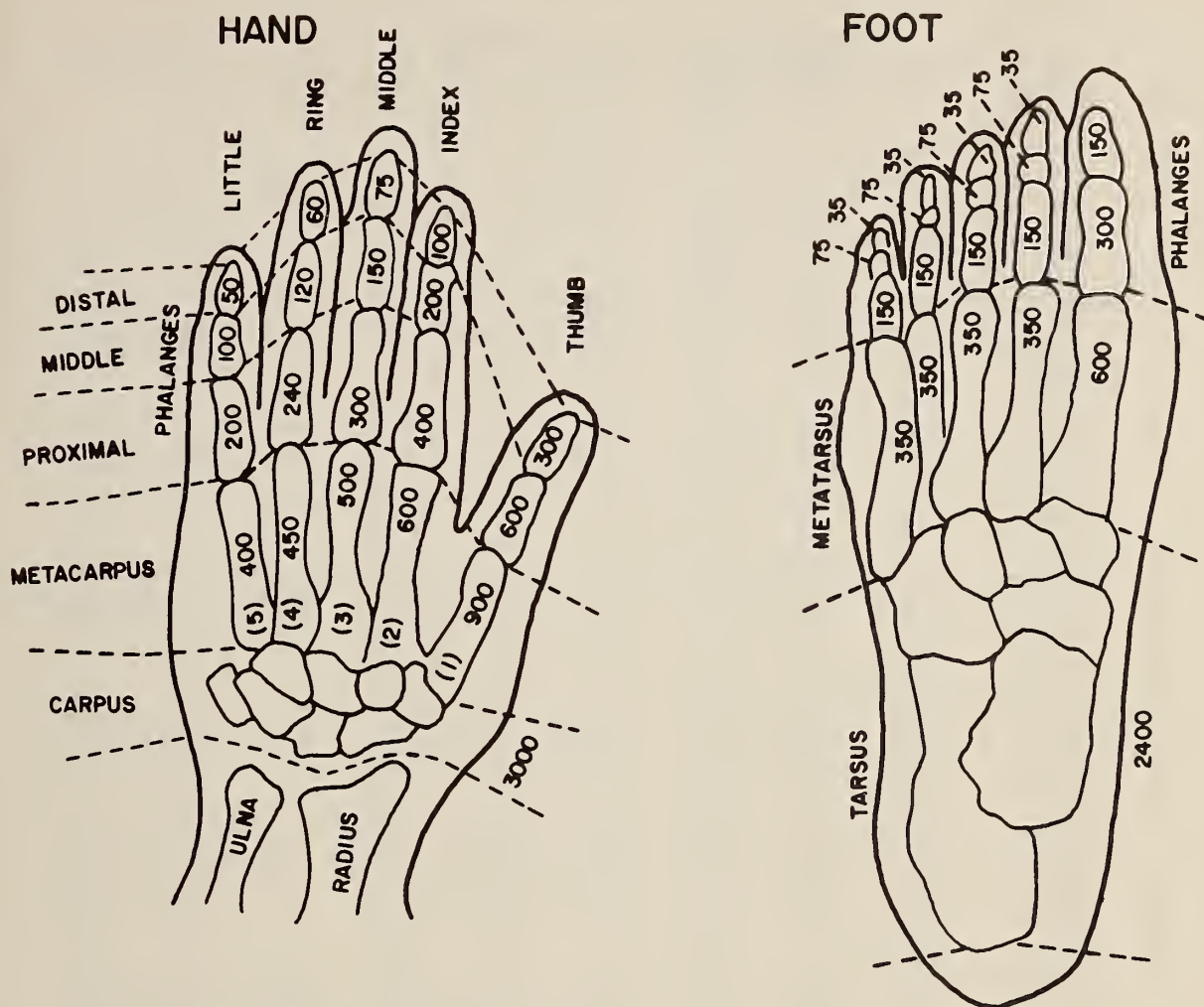
TABLE 1. - Scale of time charges¹ for weighting deaths, permanent total disabilities, and permanent partial disabilities for computing severity of injuries

Injury	Time charge (days)
Death.....	6,000
Permanant total disability.....	6,000
Dismemberment ² or total loss of use:	
Arm above elbow.....	4,500
Arm at or below elbow and above wrist.....	3,600
Hand at wrist.....	3,000
Thumb.....	(³)
Finger.....	(³)
Leg above knee.....	4,500
Leg at or below knee and above ankle.....	3,000
Foot at ankle.....	2,400
Great toe.....	(³)
Other toes.....	(³)
Loss of sight:	
One eye (whether or not there is sight in the other eye).....	1,800
Both eyes (in one accident).....	6,000
Complete industrial loss of hearing:	
One ear (whether or not there is hearing in the other ear).....	600
Both ears (in one accident).....	3,000
Unrepaired hernia.....	50

¹United States of America Standards Institute (formerly the American Standards Association, Inc.). U.S.A. Standard Method of Recording and Measuring Work Injury Experience. Bull. Z16.1--1967, 28 pp.

²Dismemberment means severance of any part of the bone.

³See figure 1 for scheduled charges for hand and foot.



NOTE :

Numbers shown on diagram are charges in days lost for loss of all or part of bone.

For additional information on use of the chart see 2.3.1.1 through 2.3.1.5 Bulletin Z.16.1-1967 USA Standard Method of Recording and Measuring Work Injury Experience

FIGURE 1. - Chart of scheduled charges for loss or loss of use involving hand or foot.

TABLE 2. - Salient statistics on injuries, injury rates, and worktime data on nonmetal mines and mills in the United States, 1967-71

	Excluding officeworkers					Including officeworkers				
	1967	1968	1969	1970	1971	1967	1968	1969	1970	1971
Injuries:										
Fatal-----	30	39	27	28	24	30	39	27	28	24
Nonfatal:										
Permanent total-----	-	2	2	2	4	-	2	2	2	4
Permanent partial-----	68	70	72	91	65	69	70	72	91	65
Temporary total-----	2,483	2,400	2,287	2,301	2,239	2,498	2,403	2,295	2,313	2,247
Total nonfatal-----	2,551	2,472	2,361	2,394	2,308	2,567	2,475	2,369	2,406	2,316
Grand total-----	2,581	2,511	2,388	2,422	2,332	2,597	2,514	2,396	2,434	2,340
Injury rates:										
Frequency per million man-hours:										
Fatal-----	0.28	0.39	0.27	0.30	0.28	0.26	0.36	0.25	0.27	0.26
Nonfatal-----	23.75	24.87	23.90	25.28	27.39	21.98	22.93	22.06	23.29	25.41
Total fatal and nonfatal-----	24.03	25.26	24.17	25.57	27.67	22.24	23.29	22.31	23.56	25.67
Severity per million man-hours:										
Fatal-----	1,676	2,354	1,640	1,774	1,709	1,541	2,168	1,508	1,626	1,580
Nonfatal-----	890	980	948	1,143	1,281	823	903	873	1,050	1,185
Total fatal and nonfatal-----	2,566	3,334	2,587	2,917	2,989	2,364	3,070	2,381	2,676	2,764
Average severity (days lost per injury):										
Permanent partial-----	681	530	515	534	584	673	530	515	534	584
Temporary total-----	20	20	19	21	21	20	20	19	21	20
All injuries-----	107	132	107	114	108	106	132	107	114	108
Average men working daily-----	49,447	45,576	44,602	42,461	38,389	53,829	49,632	48,643	46,538	41,750
Average days active-----	270	269	275	277	272	269	269	274	276	271
Man-days worked-----	13,329,735	12,282,051	12,254,582	11,762,672	10,452,733	14,505,114	13,350,622	13,331,606	12,839,777	11,313,291
Man-hours worked-----	107,399,738	99,413,910	98,798,717	94,706,700	84,277,963	116,781,682	107,955,156	107,392,530	103,303,288	91,148,066
Average hours per man per day-----	8.06	8.09	8.06	8.05	8.06	8.05	8.09	8.06	8.05	8.06
Average hours per man per year-----	2,172	2,181	2,215	2,230	2,195	2,169	2,175	2,208	2,220	2,183
Active mines-----	2,176	2,238	2,210	2,019	2,000	2,176	2,238	2,210	2,019	2,000
Active mills-----	933	887	863	859	912	933	887	863	859	912

TABLE 3. - Injury experience and worktime data at nonmetal mines and mills
in the United States, 1931-71 1/

Year	Injuries		Frequency rates per million man-hours		Average men working daily	Average days active	Man-days worked (thousands)	Man-hours worked (thousands)
	Fatal	Nonfatal	Fatal	Nonfatal				
	At Mines							
1931-----	11	841	0.61	46.88	8,949	227	2,029	17,941
1932-----	7	528	.59	44.65	6,686	201	1,347	11,825
1933-----	8	745	.57	52.71	7,678	225	1,729	14,134
1934-----	8	787	.53	51.82	8,234	236	1,947	15,187
1935-----	7	813	.43	50.28	8,339	250	2,086	16,168
1936-----	4	1,044	.19	48.43	10,380	259	2,689	21,556
1937-----	13	987	.63	48.06	10,017	256	2,561	20,536
1938-----	6	726	.34	40.72	9,526	236	2,251	17,827
1939-----	10	719	.58	41.61	9,630	228	2,196	17,281
1940-----	14	826	.74	43.50	9,780	247	2,416	18,988
1941-----	17	1,182	.73	50.89	11,088	263	2,920	23,225
1942 2/ -----	22	1,537	.78	54.71	12,677	274	3,473	28,093
1943-----	25	1,471	.89	52.54	12,713	269	3,426	27,999
1944-----	17	1,283	.66	49.81	11,261	282	3,173	25,760
1945-----	16	1,145	.65	46.52	10,371	291	3,016	24,613
1946-----	26	1,369	.97	50.94	11,312	291	3,297	26,877
1947-----	12	1,308	.42	45.40	12,176	292	3,555	28,809
1948-----	15	1,176	.54	42.33	11,950	287	3,432	27,784
1949-----	10	1,125	.37	41.75	12,077	277	3,340	26,948
1950-----	19	1,238	.67	43.51	11,977	293	3,512	28,456
1951-----	17	1,351	.56	44.84	12,500	298	3,729	30,130
1952-----	14	1,171	.48	40.44	12,447	288	3,588	28,954
1953-----	22	1,419	.72	46.54	12,765	292	3,727	30,488
1954-----	9	956	.30	32.34	12,810	284	3,638	29,564
1955 3/ -----	19	1,156	.61	37.18	14,504	264	3,836	31,093
1956-----	17	1,036	.50	30.50	15,595	268	4,178	33,963
1957-----	9	1,112	.24	29.36	17,921	262	4,691	37,877
1958-----	15	955	.43	27.56	17,820	239	4,258	34,648
1959-----	11	1,072	.30	29.50	18,765	239	4,488	36,334
1960-----	19	1,056	.52	28.69	18,653	242	4,515	36,805
1961-----	15	861	.42	24.24	18,281	238	4,347	35,517
1962-----	14	944	.43	29.06	16,917	235	3,979	32,484
1963-----	31	857	.95	26.34	15,570	256	3,988	32,539
1964-----	18	906	.50	25.18	17,087	259	4,420	35,977
1965-----	21	989	.56	26.19	17,214	268	4,612	37,760
1966-----	16	1,058	.39	25.80	18,727	268	5,027	41,003
1967-----	17	1,026	.44	26.61	18,020	264	4,765	38,550
1968-----	36	953	1.01	26.74	16,630	262	4,352	35,633
1969-----	17	880	.48	25.04	16,587	262	4,341	35,147
1970-----	18	799	.56	24.65	15,336	261	4,010	32,414
1971-----	15	741	.53	25.95	14,069	251	3,526	28,555
	At Mills							
1955-----	3	451	.15	22.73	8,723	283	2,467	19,843
1956 4/ -----	7	1,157	.17	28.44	17,585	288	5,056	40,675
1957-----	10	1,512	.17	25.30	27,081	274	7,415	59,765
1958-----	9	1,490	.13	20.94	32,401	272	8,809	71,161
1959-----	11	2,156	.12	23.77	40,800	274	11,195	90,706
1960-----	13	1,794	.15	20.77	39,568	270	10,679	86,386
1961-----	6	1,680	.07	20.02	39,031	268	10,471	83,925
1962-----	9	1,383	.12	18.53	34,900	261	9,112	74,621
1963-----	2	1,476	.03	19.44	33,732	280	9,452	75,944
1964-----	6	1,580	.08	22.11	31,967	279	8,914	71,461
1965-----	10	1,483	.14	20.89	31,215	283	8,819	70,975
1966-----	11	1,564	.15	21.48	32,001	283	9,052	72,810
1967-----	13	1,525	.19	22.15	31,427	273	8,565	68,850
1968-----	3	1,519	.05	23.82	28,946	274	7,930	63,781
1969-----	10	1,481	.16	23.27	28,015	282	7,914	63,651
1970-----	10	1,595	.16	25.60	27,125	286	7,752	62,293
1971-----	9	1,567	.16	28.12	24,320	285	6,926	55,723

1/ Mill data, except for clay, first compiled for 1955.

2/ Fluorspar for Illinois and Kentucky previously included with lead-zinc for Mississippi Valley States, now included with nonmetal mines.

3/ Includes clay mine data not compiled before 1955.

4/ Clay mill data included beginning with 1956.

APPENDIX A.--1970 DATA

TABLE A-1. - Injury experience by degree and worktime data on nonmetal mines and mills in the United States, by general work location, 1970

General work location	Injuries							Frequency rates per million man-hours			Severity rates per million man-hours			Average men working daily	Average days active	Man-days worked	Man-hours worked
	Fatal	Nonfatal				All injuries	Fatal	Non-fatal	All injuries	Fatal	Non-fatal	All injuries					
		Permanent	Tempo-rary total		Total non-fatal												
			Total	Partial													
Underground mines: Underground----- Surface----- Total or average----- Open pit mines----- Other surface mining----- Total or average, mining----- Mills----- Grand total or average-----	12	1	12		358	371	383	1.40	43.14	8,372	2,256	10,627	162	3,750	286	1,072,509	8,600,529
	1	-	2		69	71	72	.35	24.93	2,106	1,344	3,450	-	1,211	292	353,733	2,848,490
	13	1	14		427	442	455	1.14	38.61	6,813	2,029	8,842	162	4,961	287	1,426,242	11,449,019
	5	-	21		277	298	303	.32	18.93	1,906	661	2,567	1,704	8,278	233	1,931,761	15,742,637
	-	-	-		59	59	59	-	11.30	-	261	261	153	2,097	311	652,215	5,221,996
	18	1	35		763	799	817	.56	24.65	3,332	1,080	4,412	2,019	15,336	261	4,010,218	32,413,652
	10	1	56		1,538	1,595	1,605	.16	25.60	963	1,177	2,140	859	27,125	286	7,752,454	62,293,048
	28	2	91		2,301	2,394	2,422	.30	25.28	1,774	1,143	2,917	2,878	42,461	277	11,762,672	94,706,700

TABLE A-2. - Number and average severity of injuries by degree at nonmetal mines and mills in the United States, by general work location and detailed cause, 1970

General work location and detailed cause by injury	Injuries						Average severity			
	Fatal	Nonfatal				All injuries	Permanent partial	Temporary total	All injuries	
		Permanent		Temporary total	Total nonfatal					
		Total	Partial							
UNDERGROUND MINES										
Underground:										
Falls of roof or back:										
While mining-----	-	-	-	32	32	32	-	20	20	
While loading-----	4	-	-	2	2	6	-	96	4,032	
While testing or barring down back-----	1	-	-	6	6	7	-	66	914	
All other-----	1	-	-	1	1	2	-	5	3,002	
Falls of face or side:										
While mining-----	-	-	-	3	3	3	-	67	67	
All other-----	-	-	-	2	2	2	-	66	66	
Sliding or falling material or objects:										
From car, bin, platform, or chute-----	-	-	1	6	7	7	90	8	20	
From stockpile, dump, or gob-----	-	-	-	2	2	2	-	28	28	
All other-----	-	-	-	1	1	1	-	35	35	
Slips or falls of persons:										
On same level:										
While handling material-----	-	-	-	14	14	14	-	39	39	
While operating or moving machinery-----	-	-	-	3	3	3	-	33	33	
All other-----	-	-	-	13	13	13	-	31	31	
From an elevation:										
While handling material-----	-	-	-	4	4	4	-	13	13	
Caused by failure of scaffold, ladder, or other support-----	-	-	-	4	4	4	-	62	62	
All other-----	-	-	-	15	15	15	-	34	34	
Handling material:										
Prop, stull, or timber-----	-	-	1	11	12	12	236	17	36	
Ore, valuable mineral-----	-	-	-	13	13	13	-	25	25	
Rock or waste-----	-	-	-	4	4	4	-	15	15	
Rail-----	-	-	-	6	6	6	-	10	10	
Wire or wire rope-----	-	-	-	1	1	1	-	1	1	
Flying particle while handling material-----	-	-	-	3	3	3	-	5	5	
All other-----	-	-	3	73	76	76	317	24	35	
Handtools:										
Flying particle from tool or object worked on-----	-	-	1	4	5	5	540	30	132	
All other-----	-	-	-	5	5	5	-	6	6	
Stepping or kneeling on sharp or loose objects:										
Stepping on loose object-----	-	-	1	6	7	7	900	11	138	
While working on hands or knees-----	-	-	-	1	1	1	-	43	43	
Striking or bumping against objects-----	-	-	-	6	6	6	-	10	10	
Haulage:										
Cages, cars, or motors:										
Struck, run over, or squeezed between:										
Coupling or uncoupling-----	-	-	-	1	1	1	-	20	20	
Operating or riding-----	-	-	-	1	1	1	-	2	2	
All other-----	1	-	-	3	3	4	-	39	1,529	
Squeezed between cage, car, or motor, and other object:										
Coupling or uncoupling-----	-	-	-	1	1	1	-	42	42	
Operating or riding-----	-	-	-	3	3	3	-	23	23	
All other-----	-	-	-	2	2	2	-	40	40	
Derailment-----	-	-	-	2	2	2	-	22	22	
Collision (while under control)-----	1	-	-	-	-	1	-	-	6,000	
Shuttle cars, transloaders, and small mobile trucks:										
Struck or run over-----	-	-	-	2	2	2	-	53	53	
Squeezed between shuttle car, transloader, or small mobile truck, and other object-----	-	-	-	5	5	5	-	18	18	
All other-----	-	-	-	8	8	8	-	21	21	
Automobiles, gasoline or diesel trucks:										
While operating-----	-	1	1	11	13	13	180	23	495	
Slip or fall on or from-----	-	-	-	8	8	8	-	5	5	
Miscellaneous haulage:										
Rope or cable on haulage-----	-	-	1	7	8	8	240	16	44	
Slip or strain from moving car by hand-----	-	-	1	-	1	1	50	-	50	
Flying particle-----	-	-	-	1	1	1	-	4	4	
Explosives: Flying fragments-----	-	-	-	1	1	1	-	203	203	
Electricity:										
Trolley wire or pole-----	-	-	-	1	1	1	-	11	11	
Transformer, generator, or stationary motor-----	-	-	-	1	1	1	-	22	22	
Power or lighting circuit-----	-	-	-	1	1	1	-	17	17	
Cut-out switch or junction box-----	-	-	-	4	4	4	-	4	4	
Cable, cable arc, or blowup-----	-	-	-	2	2	2	-	21	21	
Machinery:										
While moving mining machine (chain, arc, longwall)-----	-	-	-	1	1	1	-	5	5	
While setting up mining machine (jack, bar, skid)-----	-	-	-	1	1	1	-	5	5	
While operating mining machine (cutter bar, chain, bit)-----	-	-	1	1	2	2	1,300	4	652	
Belt conveyor-----	1	-	-	1	1	2	-	11	3,006	
Mucking machine, mechanical loader-----	-	-	-	1	1	1	-	185	185	
Power drill; rotary or percussive (except rock bolting)-----	-	-	-	21	21	21	-	21	21	
Power equipment (except drill) for rock bolting-----	-	-	-	1	1	1	-	65	65	
Power shovel, dragline, bulldozer, etc.-----	-	-	-	4	4	4	-	16	16	
While moving any machine except mining or loading-----	-	-	-	2	2	2	-	8	8	
Particle set in motion by machinery (except rock bolting)-----	-	-	-	3	3	3	-	9	9	
Continuous mining machine-----	-	-	1	-	1	1	75	-	75	
All other-----	-	-	-	3	3	3	-	38	38	
Fires or suffocation from fires-----	1	-	-	-	-	1	-	-	6,000	
Miscellaneous causes:										
Acetylene or electric welding or cutting-----	-	-	-	1	1	1	-	1	1	
Irritation or burn from caustic or acid-----	-	-	-	1	1	1	-	10	10	
All other-----	-	-	-	7	7	7	-	9	9	
Total or average, excluding shaft and slope-----	10	1	12	354	367	377	380	25	210	

TABLE A-2. - Number and average severity of injuries by degree at nonmetal mines and mills in the United States, by general work location and detailed cause, 1970 - Continued

General work location and detailed cause by injury	Injuries					Average severity			
	Fatal	Nonfatal			All injuries	Permanent partial	Temporary total	All injuries	
		Permanent		Temporary total					Total nonfatal
		Total	Partial						
UNDERGROUND MINES - Continued									
Shaft and slope:									
Falls of roof or back: While mining-----	-	-	-	1	1	1	-	44	44
Sliding or falling material or objects: Falling cage-----	2	-	-	-	-	2	-	-	6,000
Slips or falls of persons:									
From an elevation: Down shaft or slope-----	-	-	-	1	1	1	-	4	4
Striking or bumping against objects-----	-	-	-	1	1	1	-	4	4
Miscellaneous haulage: Rope or cable on haulage-----	-	-	-	1	1	1	-	60	60
Total or average, shaft and slope-----	2	-	-	4	4	6	-	28	2,019
Total or average, underground-----	12	1	12	358	371	383	380	25	239
Surface at underground:									
Sliding or falling material or objects: From car, bin, platform, or chute-----	-	-	-	1	1	1	-	36	36
Slips or falls of persons:									
On same level:									
While handling material-----	-	-	-	4	4	4	-	8	8
All other-----	-	-	-	6	6	6	-	17	17
From an elevation:									
While handling material-----	-	-	-	2	2	2	-	15	15
While operating or moving machinery-----	-	-	-	1	1	1	-	5	5
Caused by failure of scaffold, ladder, or other support-----	-	-	-	1	1	1	-	39	39
All other-----	-	-	-	6	6	6	-	34	34
Handling material:									
Ore, valuable mineral-----	-	-	-	2	2	2	-	18	18
Rock or waste-----	-	-	-	1	1	1	-	4	4
All other-----	-	-	1	18	19	19	940	38	86
Handtools:									
Crowbar or bar-----	-	-	-	2	2	2	-	8	8
All other-----	-	-	-	1	1	1	-	104	104
Stepping or kneeling on sharp or loose objects:									
Stepping on sharp object-----	-	-	-	1	1	1	-	2	2
Stepping on loose object-----	-	-	-	3	3	3	-	7	7
Striking or bumping against objects-----	-	-	-	1	1	1	-	2	2
Haulage:									
Shuttle cars, transloaders, and small mobile trucks-----	-	-	-	1	1	1	-	6	6
Railroad cars and locomotives-----	-	-	-	3	3	3	-	21	21
Automobiles, gasoline or diesel trucks: While operating-----	-	-	-	4	4	4	-	10	10
Miscellaneous haulage: Rope or cable on haulage-----	-	-	-	3	3	3	-	42	42
Machinery:									
Stationary machinery-----	-	-	1	3	4	4	1,140	50	322
While moving any machine except mining or loading-----	1	-	-	-	-	1	-	-	6,000
Particle set in motion by machinery-----	-	-	-	1	1	1	-	4	4
All other-----	-	-	-	1	1	1	-	3	3
Miscellaneous causes:									
Acetylene or electric welding or cutting-----	-	-	-	2	2	2	-	4	4
Burn from controlled fire-----	-	-	-	1	1	1	-	28	28
Total or average, surface at underground-----	1	-	2	69	71	72	1,040	25	136
Total or average, underground mines-----	13	1	14	427	442	455	474	25	222
OPEN PIT MINES									
Falls of face or side-----	-	-	-	1	1	1	-	6	6
Sliding or falling material or objects:									
From car, bin, platform, or chute-----	-	-	2	7	9	9	240	55	96
All other-----	-	-	-	2	2	2	-	6	6
Slips or falls of persons:									
On same level:									
While handling material-----	-	-	-	7	7	7	-	18	18
While operating or moving machinery-----	-	-	-	1	1	1	-	3	3
All other-----	-	-	-	16	16	16	-	13	13
From an elevation:									
While handling material-----	-	-	-	6	6	6	-	15	15
While operating or moving machinery-----	-	-	-	1	1	1	-	75	75
Caused by failure of scaffold, ladder, or other support-----	-	-	-	5	5	5	-	48	48
All other-----	-	-	1	16	17	17	225	36	47
Handling material:									
Prop, stull, or timber-----	-	-	-	2	2	2	-	18	18
Ore, valuable mineral-----	-	-	-	8	8	8	-	18	18
Rock or waste-----	-	-	1	3	4	4	50	7	18
Rail-----	-	-	-	3	3	3	-	10	10
Flying particle while handling material-----	-	-	-	4	4	4	-	2	2
All other-----	-	-	6	38	44	44	222	14	42
Handtools:									
Pick-----	-	-	-	6	6	6	-	11	11
Hammer or sledge-----	-	-	-	2	2	2	-	2	2
Crowbar or bar-----	-	-	1	2	3	3	50	27	35
Shovel-----	-	-	-	1	1	1	-	8	8
Flying particle from tool or object worked on-----	-	-	-	3	3	3	-	4	4
All other-----	-	-	-	19	19	19	-	21	21
Stepping or kneeling on sharp or loose objects:									
Stepping on sharp object-----	-	-	-	2	2	2	-	16	16
Stepping on loose object-----	-	-	-	13	13	13	-	14	14

TABLE A-2. - Number and average severity of injuries by degree at nonmetal mines and mills in the United States, by general work location and detailed cause, 1970 - Continued

Geeneral work location and detailed cause by injury	Injuries					Average severity			
	Fatal	Nonfatal				All injuries	Permanent partial	Temporary total	All injuries
		Permanent		Temporary total	Total nonfatal				
		Total	Partial						
OPEN PIT MINES - Continued									
Striking or bumping agaioست objects-----	-	-	-	1	1	1	-	30	30
Haulage:									
Skips, cars, or motors:									
Squeezed between skip, car, or motor, and other object:									
Pulling, pushing, or dropping-----	-	-	-	1	1	1	-	15	15
Shuttle cars, transloaders, and small mobile trucks-----	-	-	1	1	2	2	240	4	122
Railroad cars and locomotives-----	-	-	1	4	5	5	60	20	28
Automobiles, gasoline or diesel trucks:									
While operating-----	1	-	2	20	22	23	642	19	333
Slip or fall on or from-----	-	-	-	9	9	9	-	13	13
Miscellaneous haulage:									
Coupling or uncoupling (cars not moving)-----	-	-	1	-	1	1	200	-	200
Rope or cable on haulage-----	-	-	1	7	8	8	75	15	22
Flying particle-----	-	-	-	1	1	1	-	3	3
All other-----	-	-	-	2	2	2	-	1	1
Electricity:									
Transformer, generator, or stationary motor-----	-	-	-	1	1	1	-	13	13
Power or lighting circuit-----	3	-	-	-	-	3	-	-	6,000
Machinery:									
Belt conveyor-----	-	-	-	3	3	3	-	78	78
Chain, bucket, shaker, or screw conveyor-----	-	-	-	2	2	2	-	10	10
Power drill; rotary or percussive-----	-	-	-	3	3	3	-	5	5
Power shovel, dragline, bulldozer, etc.-----	1	-	2	25	27	28	470	21	267
Stationary machinery-----	-	-	2	4	6	6	142	41	75
While moving any machine except mining or loading-----	-	-	-	3	3	3	-	17	17
Particle set in motion by machinery-----	-	-	-	3	3	3	-	4	4
All other-----	-	-	-	2	2	2	-	6	6
Suffocation (no flame or smoldering): Foreign gas-----	-	-	-	1	1	1	-	6	6
Fires or suffocation from fires:									
Belt conveyor-----	-	-	-	1	1	1	-	23	23
Oil, gasoline, other flammable liquid-----	-	-	-	1	1	1	-	13	13
Miscellaneous causes:									
Flying particle from draft or wind-----	-	-	-	1	1	1	-	1	1
Acetylene or electric welding or cutting-----	-	-	-	4	4	4	-	8	8
Burn from controlled fire-----	-	-	-	3	3	3	-	7	7
All other-----	-	-	-	6	6	6	-	12	12
Total or average, open pit mines-----	5	-	21	277	298	303	249	19	133
OTHER SURFACE MINING									
Sliding or falling material or objects-----	-	-	-	1	1	1	-	1	1
Slips or falls of persons:									
On same level:									
While handling material-----	-	-	-	2	2	2	-	12	12
All other-----	-	-	-	7	7	7	-	39	39
From an elevation:									
Caused by failure of scaffold, ladder, or other support-----	-	-	-	4	4	4	-	66	66
All other-----	-	-	-	2	2	2	-	32	32
Handling material:									
Rail-----	-	-	-	4	4	4	-	12	12
All other-----	-	-	-	13	13	13	-	20	20
Stepping or kneeling on sharp or loose objects: Stepping on sharp object-----	-	-	-	4	4	4	-	18	18
Striking or bumping against objects-----	-	-	-	1	1	1	-	5	5
Haulage:									
Automobiles, gasoline or diesel trucks: Slip or fall on or from-----	-	-	-	2	2	2	-	6	6
Water transportation-----	-	-	-	1	1	1	-	62	62
Miscellaneous haulage:									
Coupling or uncoupling (cars not moving)-----	-	-	-	1	1	1	-	1	1
Rope or cable on haulage-----	-	-	-	1	1	1	-	18	18
Electricity-----	-	-	-	1	1	1	-	36	36
Machinery:									
Power shovel, dragline, bulldozer, etc.-----	-	-	-	1	1	1	-	29	29
Stationary machinery-----	-	-	-	1	1	1	-	10	10
Suffocation (no flame or smoldering): Foreign gas-----	-	-	-	2	2	2	-	10	10
Miscellaneous causes:									
Irritation or burn from caustic or acid-----	-	-	-	5	5	5	-	6	6
Burn from controlled fire-----	-	-	-	5	5	5	-	26	26
All other-----	-	-	-	1	1	1	-	3	3
Total or average, other surface mining-----	-	-	-	59	59	59	-	23	23
Total or average, mining-----	18	1	35	763	799	817	339	22	175
MILLS									
Sliding or falling material or objects:									
Dropped or thrown by coworker-----	-	-	-	4	4	4	-	4	4
From car, bin, platform, or chute-----	2	-	-	14	14	16	-	26	773
Falling equipment or machinery under repair-----	-	-	-	1	1	1	-	2	2
From stockpile, dump, or gob-----	-	-	-	2	2	2	-	24	24
All other-----	-	-	-	6	6	6	-	78	78

TABLE A-2. - Number and average severity of injuries by degree at nonmetal mines and mills in the United States, by general work location and detailed cause, 1970 - Continued

General work location and detailed cause by injury	Injuries					Average severity			
	Fatal	Nonfatal			All injuries	Permanent partial	Temporary total	All injuries	
		Permanent		Temporary total					
		Total	Partial		Total nonfatal				
MILLS - Continued									
Slips or falls of persons:									
On same level:									
While escaping another hazard-----	-	-	-	1	1	1	-	7	7
While handling material-----	-	-	2	40	42	42	1,100	22	74
Caused by handtool slipping or breaking-----	-	-	-	1	1	1	-	1	1
While operating or moving machinery-----	-	-	-	4	4	4	-	7	7
All other-----	-	-	1	80	81	81	300	23	26
From an elevation:									
While escaping another hazard-----	-	-	-	2	2	2	-	86	86
While handling material-----	-	-	1	30	31	31	600	31	49
While operating or moving machinery-----	-	-	-	8	8	8	-	40	40
Caused by failure of scaffold, ladder, or other support-----	-	-	-	25	25	25	-	40	40
All other-----	-	-	1	85	86	86	2,400	19	47
Handling material:									
Prop, stull, or timber-----	-	-	-	27	27	27	-	9	9
Ore, valuable mineral-----	4	-	3	81	84	88	50	15	288
Rock or waste-----	-	-	-	9	9	9	-	15	15
Rail-----	-	-	1	20	21	21	75	18	20
Flying particle while handling material-----	-	-	-	39	39	39	-	5	5
All other-----	-	-	11	477	488	488	231	19	24
Handtools:									
Pick-----	-	-	-	2	2	2	-	6	6
Hammer or sledge-----	-	-	-	6	6	6	-	6	6
Crowbar or bar-----	-	-	-	14	14	14	-	12	12
Shovel-----	-	-	-	1	1	1	-	47	47
In hand of fellow worker-----	-	-	-	5	5	5	-	29	29
Flying particle from tool or object worked on-----	-	-	-	2	2	2	-	8	8
All other-----	-	-	1	20	21	21	900	12	54
Stepping or kneeling on sharp or loose objects:									
Stepping on sharp object-----	-	-	-	6	6	6	-	15	15
Stepping on loose object-----	-	-	-	17	17	17	-	23	23
While working on hands and knees-----	-	-	-	1	1	1	-	1	1
Striking or bumping against objects-----	-	-	-	25	25	25	-	13	13
Haulage:									
Cages, cars, or motors:									
Struck, run over, or squeezed between:									
Pulling, pushing, or dropping-----	-	-	-	1	1	1	-	4	4
All other-----	-	-	-	3	3	3	-	11	11
Squeezed between cage, car, or motor, and other object:									
Switching, spragging, blocking, or braking-----	-	-	-	2	2	2	-	16	16
Pulling, pushing, or dropping-----	-	-	-	6	6	6	-	26	26
Shuttle cars, transloaders, and small mobile trucks:									
Struck or run over-----	-	-	-	14	14	14	-	54	54
Squeezed between shuttle car, transloader, or small mobile truck, and other object-----	-	-	-	12	12	12	-	13	13
All other-----	-	-	2	27	29	29	250	20	36
Railroad cars and locomotives-----	-	-	3	59	62	62	860	21	62
Automobiles, gasoline or diesel trucks:									
While operating-----	1	-	1	22	23	24	360	37	299
Slip or fall on or from-----	-	-	-	21	21	21	-	20	20
Water transportation-----	-	-	-	2	2	2	-	55	55
Miscellaneous haulage:									
Rope or cable on haulage-----	-	-	3	14	17	17	200	20	52
Slip or strain from moving car by hand-----	-	-	1	27	28	28	50	34	35
All other-----	-	-	-	6	6	6	-	14	14
Electricity:									
Cut-out switch or junction box-----	-	-	-	2	2	2	-	9	9
Cable, cable arc, or blowup-----	-	-	1	-	1	1	300	-	300
All other-----	-	-	-	3	3	3	-	23	23
Machinery:									
Belt conveyor-----	1	-	6	30	36	37	1,416	42	426
Chain, bucket, shaker, or screw conveyor-----	-	-	1	6	7	7	540	6	82
Power drill; rotary or percussive-----	-	-	-	9	9	9	-	16	16
Power shovel, dragline, bulldozer, etc.-----	1	-	2	17	19	20	220	14	334
Stationary machinery-----	1	-	15	73	88	89	913	17	235
While moving any machine except mining or loading-----	-	-	-	2	2	2	-	38	38
Particle set in motion by machinery-----	-	-	-	9	9	9	-	21	21
All other-----	-	-	-	2	2	2	-	38	38
Suffocation (no flame or smoldering): Foreign gas-----									
Fires or suffocation from fires: Oil, gasoline, other flammable liquid-----	-	-	-	3	3	3	-	12	12
Miscellaneous causes:									
Flying particle from draft or wind-----	-	-	-	10	10	10	-	3	3
Acetylene or electric welding or cutting-----	-	-	-	20	20	20	-	6	6
Irritation or burn from caustic or acid-----	-	-	-	21	21	21	-	12	12
Burn from controlled fire-----	-	-	-	37	37	37	-	12	12
All other-----	-	-	-	21	21	21	-	21	21
Pneumoconiosis-----	-	1	-	1	2	2	-	12	3,006
Total or average, mills-----	10	1	56	1,538	1,595	1,605	656	20	83
Grand total or average-----	28	2	91	2,301	2,394	2,422	534	21	114

TABLE A-3. - Fatal injuries and distribution by part of body injured at nonmetal mines and mills in the United States, by general work location and detailed cause, 1970

General work location and detailed cause	Injuries									Percentage distribution	
	Head, face, neck (excl. eye)	Eye	Trunk	Arm (above wrist)	Wrist, hand, fingers	Leg (above ankle)	Ankle, foot, toes	Multiple	Unclassified (no data)		Total
UNDERGROUND MINES											
Underground (including shaft and slope):											
Falls of roof or back:											
While loading-----	-	-	-	-	-	-	-	4	-	4	33.33
While testing or barring down back-----	-	-	-	-	-	-	-	1	-	1	8.33
All other-----	1	-	-	-	-	-	-	-	-	1	8.33
Sliding or falling material or objects: Falling cage-----	-	-	-	-	-	-	-	2	-	2	16.67
Haulage:											
Cages, cars, or motors:											
Struck, run over, or squeezed between-----	-	-	1	-	-	-	-	-	-	1	8.33
Collision (while under control)-----	-	-	-	-	-	-	-	1	-	1	8.33
Machinery: Belt conveyor-----	-	-	-	1	-	-	-	-	-	1	8.33
Fires or suffocation from fires-----	-	-	1	-	-	-	-	-	-	1	8.33
Total, underground-----	1	-	2	1	-	-	-	8	-	12	-
Percentage distribution-----	8.33	-	16.67	8.33	-	-	-	66.67	-	-	-
Surface at underground:											
Machinery: While moving any machine except mining or loading--	-	-	-	-	-	-	-	1	-	1	100.00
Total, surface at underground-----	-	-	-	-	-	-	-	1	-	1	-
Percentage distribution-----	-	-	-	-	-	-	-	100.00	-	-	-
Total, underground mines-----	1	-	2	1	-	-	-	9	-	13	-
Percentage distribution-----	7.69	-	15.38	7.69	-	-	-	69.23	-	-	-
ALL SURFACE MINES											
Haulage:											
Automobiles, gasoline or diesel trucks: While operating-----	-	-	1	-	-	-	-	-	-	1	20.00
Electricity: Power or lighting circuit-----	-	-	-	-	-	-	-	3	-	3	60.00
Machinery: Power shovel, dragline, bulldozer, etc-----	-	-	-	-	-	-	-	1	-	1	20.00
Total, surface mines-----	-	-	1	-	-	-	-	4	-	5	-
Percentage distribution-----	-	-	20.00	-	-	-	-	80.00	-	-	-
Total, mining-----	1	-	3	1	-	-	-	13	-	18	-
Percentage distribution-----	5.56	-	16.67	5.56	-	-	-	72.22	-	-	-
MILLS											
Sliding or falling material or objects: From car, bin, platform, or chute-----	-	-	2	-	-	-	-	-	-	2	20.00
Handling material: Ore, valuable mineral-----	-	-	4	-	-	-	-	-	-	4	40.00
Haulage:											
Automobiles, gasoline or diesel trucks: While operating-----	-	-	-	-	-	-	-	1	-	1	10.00
Machinery:											
Belt conveyor-----	-	-	-	1	-	-	-	-	-	1	10.00
Power shovel, dragline, bulldozer, etc-----	-	-	-	-	-	-	-	1	-	1	10.00
Stationary machinery-----	1	-	-	-	-	-	-	-	-	1	10.00
Total, mills-----	1	-	6	1	-	-	-	2	-	10	-
Percentage distribution-----	10.00	-	60.00	10.00	-	-	-	20.00	-	-	-
Grand total-----	2	-	9	2	-	-	-	15	-	28	-
Percentage distribution-----	7.14	-	32.14	7.14	-	-	-	53.57	-	-	-

TABLE A-4. - Injuries, distribution, average severity by degree, and injury rates at nonmetal mines and mills in the United States, by general work location and part of body injured, 1970

General work location and part of body injured	Injuries						Percent- age distrib- ution of all injuries 1/	Average severity			Frequency rates per million man-hours		Severity rates per million man-hours	
	Fatal	Nonfatal				All injuries		Perma- nent partial	Tempo- rary total	All injuries	Fatal	Non- fatal	Fatal	Non- fatal
		Permanent		Tempo- rary total	Total non- fatal									
		Total	Partial											
UNDERGROUND MINES														
Underground (including shaft and slope):														
Head, face, neck (excl. eye)-----	1	-	-	22	22	23	6.1	-	13	273	0.12	2.56	698	33
Eye-----	-	-	1	18	19	19	5.1	540	6	34	-	2.21	-	75
Trunk-----	2	1	4	118	123	125	33.4	295	27	179	.23	14.30	1,395	1,205
Arm (above wrist)-----	1	-	-	11	11	12	3.2	-	66	560	.12	1.28	698	84
Wrist, hand, fingers-----	-	-	6	54	60	60	16.0	257	22	45	-	6.98	-	314
Leg (above ankle)-----	-	-	-	45	45	45	12.0	-	33	33	-	5.23	-	171
Ankle, foot, toes-----	-	-	1	56	57	57	15.2	1,300	18	41	-	6.63	-	271
Multiple-----	8	-	-	25	25	33	8.8	-	29	1,476	.93	2.91	5,581	83
Unclassified (no data)-----	-	-	-	9	9	9	-	-	18	18	-	1.05	-	19
Total or average-----	12	1	12	358	371	383	-	380	25	239	1.40	43.14	8,372	2,256
Surface at underground:														
Head, face, neck (excl. eye)-----	-	-	-	6	6	6	8.5	-	21	21	-	2.11	-	45
Eye-----	-	-	-	3	3	3	4.2	-	4	4	-	1.05	-	4
Trunk-----	-	-	-	30	30	30	42.3	-	36	36	-	10.53	-	374
Wrist, hand, fingers-----	-	-	2	11	13	13	18.3	1,040	9	167	-	4.56	-	763
Leg (above ankle)-----	-	-	-	5	5	5	7.0	-	9	9	-	1.76	-	15
Ankle, foot, toes-----	-	-	-	8	8	8	11.3	-	18	18	-	2.81	-	51
Multiple-----	1	-	-	5	5	6	8.5	-	50	1,042	.35	1.76	2,106	88
Unclassified (no data)-----	-	-	-	1	1	1	-	-	10	10	-	.35	-	4
Total or average-----	1	-	2	69	71	72	-	1,040	25	136	.35	24.93	2,106	1,344
Total or average, underground mines-----	13	1	14	427	442	455	-	474	25	222	1.14	38.61	6,813	2,029
OPEN PIT MINES														
Head, face, neck (excl. eye)-----	-	-	-	10	10	10	3.6	-	24	24	-	.64	-	15
Eye-----	-	-	-	16	16	16	5.7	-	15	15	-	1.02	-	15
Trunk-----	1	-	6	97	103	104	37.0	147	18	83	.06	6.54	381	166
Arm (above wrist)-----	-	-	-	12	12	12	4.3	-	30	30	-	.76	-	23
Wrist, hand, fingers-----	-	-	13	40	53	53	18.9	224	12	64	-	3.37	-	215
Leg (above ankle)-----	-	-	2	34	36	36	12.8	712	23	61	-	2.29	-	140
Ankle, foot, toes-----	-	-	-	37	37	37	13.2	-	19	19	-	2.35	-	44
Multiple-----	4	-	-	9	9	13	4.6	-	33	1,869	.25	.57	1,525	19
Unclassified (no data)-----	-	-	-	22	22	22	-	-	17	17	-	1.40	-	24
Total or average-----	5	-	21	277	298	303	-	249	19	133	.32	18.93	1,906	661
OTHER SURFACE MINING														
Head, face, neck (excl. eye)-----	-	-	-	2	2	2	3.5	-	8	8	-	.38	-	3
Eye-----	-	-	-	4	4	4	7.0	-	7	7	-	.77	-	5
Trunk-----	-	-	-	13	13	13	22.8	-	17	17	-	2.49	-	42
Arm (above wrist)-----	-	-	-	4	4	4	7.0	-	36	36	-	.77	-	27
Wrist, hand, fingers-----	-	-	-	9	9	9	15.8	-	19	19	-	1.72	-	32
Leg (above ankle)-----	-	-	-	11	11	11	19.3	-	43	43	-	2.11	-	91
Ankle, foot, toes-----	-	-	-	9	9	9	15.8	-	22	22	-	1.72	-	38
Multiple-----	-	-	-	5	5	5	8.8	-	16	16	-	.96	-	15
Unclassified (no data)-----	-	-	-	2	2	2	-	-	17	17	-	.38	-	7
Total or average-----	-	-	-	59	59	59	-	-	23	23	-	11.30	-	261
Total or average, mining-----	18	1	35	763	799	817	-	339	22	175	.56	24.65	3,332	1,080
MILLS														
Head, face, neck (excl. eye)-----	1	-	-	54	54	55	3.6	-	23	132	.02	.87	96	20
Eye-----	-	-	-	94	94	94	6.2	-	5	5	-	1.51	-	7
Trunk-----	6	1	15	494	510	516	34.1	260	22	110	.10	8.19	578	332
Arm (above wrist)-----	1	-	2	71	73	74	4.9	2,430	22	167	.02	1.17	96	103
Wrist, hand, fingers-----	-	-	29	256	285	285	18.8	288	16	44	-	4.58	-	199
Leg (above ankle)-----	-	-	4	143	147	147	9.7	2,250	25	86	-	2.36	-	202
Ankle, foot, toes-----	-	-	5	268	273	273	18.0	1,224	19	41	-	4.38	-	180
Multiple-----	2	-	1	66	67	69	4.6	4,500	29	267	.03	1.08	193	103
Unclassified (no data)-----	-	-	-	92	92	92	-	-	20	20	-	1.48	-	30
Total or average, mills-----	10	1	56	1,538	1,595	1,605	-	656	20	83	.16	25.60	963	1,177
Grand total or average-----	28	2	91	2,301	2,394	2,422	-	534	21	114	.30	25.28	1,774	1,143

¹ Number of injuries for which part of body is "Unclassified" is excluded in calculating percentages. Therefore, 100 percent for underground is 374; for surface, 71; for open pit, 281; for other surface mining, 57; and for mills, 1,513. Distribution percentages may not add to 100.0 because of independent rounding.

TABLE A-5. - Injuries, distribution, average severity by degree, and injury rates at nonmetal mines and mills in the United States, by general work location and nature of injury, 1970

General work location and nature of injury	Injuries						Percentage distribution of all injuries 1/	Average severity			Frequency rates per million man-hours		Severity rates per million man-hours	
	Fatal	Nonfatal				All injuries		Permanent partial	Temporary total	All injuries	Fatal	Non-fatal	Fatal	Non-fatal
		Permanent		Temporary total	Total non-fatal									
		Total	Partial											
UNDERGROUND MINES														
Underground (including shaft and slope):														
Amputation, enucleation-----	1	-	5	-	5	6	1.6	503	-	1,419	0.12	0.58	698	292
Asphyxiation-----	1	-	-	-	-	1	.3	-	-	6,000	.12	-	698	-
Crushing, contusion, bruise-----	9	-	1	111	112	121	32.4	236	14	461	1.05	13.02	6,279	207
Burn, scald (except chemical)-----	-	-	-	9	9	9	2.4	-	12	12	-	1.05	-	13
Chemical burn-----	-	-	-	1	1	1	.3	-	10	10	-	.12	-	1
Radiation, radiating substance-----	-	-	-	1	1	1	.3	-	1	1	-	.12	-	(2)
Cut, laceration, puncture-----	-	-	-	41	41	41	11.0	-	17	17	-	4.77	-	79
Electric shock-----	-	-	-	2	2	2	.5	-	4	4	-	.23	-	1
Foreign body in eye-----	-	-	1	9	10	10	2.7	540	4	58	-	1.16	-	67
Fracture-----	1	1	2	39	42	43	11.5	135	65	344	.12	4.88	698	1,023
Hernia (inguinal)-----	-	-	2	6	8	8	2.1	50	45	46	-	.93	-	43
Poisoning (systemic)-----	-	-	-	1	1	1	.3	-	3	3	-	.12	-	(2)
Strain, sprain, dislocation-----	-	-	1	125	126	126	33.7	900	27	33	-	14.65	-	490
Concussion (cerebral)-----	-	-	-	1	1	1	.3	-	16	16	-	.12	-	2
Hernia (except inguinal)-----	-	-	-	1	1	1	.3	-	70	70	-	.12	-	8
Inflammation or irritation of joints, tendons, muscles-----	-	-	-	2	2	2	.5	-	42	42	-	.23	-	10
Unclassified (no data)-----	-	-	-	9	9	9	-	-	18	18	-	1.05	-	19
Total or average-----	12	1	12	358	371	383	-	380	25	239	1.40	43.14	8,372	2,256
Surface at underground:														
Amputation, enucleation-----	-	-	2	-	2	2	2.8	1,040	-	1,040	-	.70	-	730
Crushing, contusion, bruise-----	1	-	-	17	17	18	25.4	-	22	354	.35	5.97	2,106	132
Burn, scald (except chemical)-----	-	-	-	4	4	4	5.6	-	9	9	-	1.40	-	12
Radiation, radiating substance-----	-	-	-	1	1	1	1.4	-	5	5	-	.35	-	2
Cut, laceration, puncture-----	-	-	-	3	3	3	4.2	-	3	3	-	1.05	-	3
Foreign body in eye-----	-	-	-	1	1	1	1.4	-	4	4	-	.35	-	1
Fracture-----	-	-	-	9	9	9	12.7	-	44	44	-	3.16	-	138
Hernia (inguinal)-----	-	-	-	1	1	1	1.4	-	56	56	-	.35	-	20
Strain, sprain, dislocation-----	-	-	-	31	31	31	43.7	-	25	25	-	10.88	-	267
Hernia (except inguinal)-----	-	-	-	1	1	1	1.4	-	101	101	-	.35	-	35
Unclassified (no data)-----	-	-	-	1	1	1	-	-	10	10	-	.35	-	4
Total or average-----	1	-	2	69	71	72	-	1,040	25	136	.35	24.93	2,106	1,344
Total or average, underground mines-----	13	1	14	427	442	455	-	474	25	222	1.14	38.61	6,813	2,029
OPEN PIT MINES														
Amputation, enucleation-----	-	-	11	-	11	11	3.9	221	-	221	-	.70	-	155
Asphyxiation-----	-	-	-	1	1	1	.4	-	6	6	-	.06	-	(2)
Crushing, contusion, bruise-----	1	-	2	71	73	74	26.3	240	12	99	.06	4.64	381	86
Burn, scald (except chemical)-----	-	-	-	7	7	7	2.5	-	10	10	-	.44	-	5
Radiation, radiating substance-----	-	-	-	2	2	2	.7	-	4	4	-	.13	-	(2)
Cut, laceration, puncture-----	1	-	-	32	32	33	11.7	-	10	192	.06	2.03	381	21
Electric shock-----	3	-	-	-	-	3	1.1	-	-	6,000	.19	-	1,143	-
Foreign body in eye-----	-	-	-	10	10	10	3.6	-	4	4	-	.64	-	3
Fracture-----	-	-	1	23	24	24	8.5	1,200	44	92	-	1.52	-	141
Hernia (inguinal)-----	-	-	4	2	6	6	2.1	50	50	50	-	.38	-	19
Poisoning (systemic)-----	-	-	-	1	1	1	.4	-	1	1	-	.06	-	(2)
Strain, sprain, dislocation-----	-	-	2	104	106	106	37.7	154	23	25	-	6.73	-	169
Hernia (except inguinal)-----	-	-	1	1	2	2	.7	600	4	302	-	.13	-	38
Other, not elsewhere classified-----	-	-	-	1	1	1	.4	-	11	11	-	.06	-	1
Unclassified (no data)-----	-	-	-	22	22	22	-	-	17	17	-	1.40	-	24
Total or average-----	5	-	21	277	298	303	-	249	19	133	.32	18.93	1,906	661
OTHER SURFACE MINING														
Asphyxiation-----	-	-	-	2	2	2	3.5	-	10	10	-	.38	-	4
Crushing, contusion, bruise-----	-	-	-	12	12	12	21.1	-	17	17	-	2.30	-	39
Burn, scald (except chemical)-----	-	-	-	5	5	5	8.8	-	26	26	-	.96	-	25
Chemical burn-----	-	-	-	5	5	5	8.8	-	6	6	-	.96	-	6
Cut, laceration, puncture-----	-	-	-	6	6	6	10.5	-	11	11	-	1.15	-	12
Electric shock-----	-	-	-	1	1	1	1.8	-	36	36	-	.19	-	7
Fracture-----	-	-	-	10	10	10	17.5	-	55	55	-	1.91	-	105

1/ Number of injuries for which nature of injury is "Unclassified" is excluded in calculating percentages. Therefore, 100 percent for underground is 374; for surface, 71; for open pit, 281; for other surface mining, 57; and for mills, 1,513. Distribution percentages may not add to 100.0 because of independent rounding.

2/ Less than 0.5.

TABLE A-5. - Injuries, distribution, average severity by degree, and injury rates at nonmetal mines and mills in the United States, by general work location and nature of injury, 1970 - Continued

General work location and nature of injury	Injuries						Percent- age distrib- ution of all injuries 1/	Average severity			Frequency rates per million man-hours		Severity rates per million man-hours	
	Fatal	Nonfatal				All injuries		Perma- nent partial	Tempo- rary total	All injuries	Fatal	Non- fatal	Fatal	Non- fatal
		Permanent		Tempo- rary total	Total non- fatal									
		Total	Partial											
OTHER SURFACE MINING - Continued														
Poisoning (systemic)-----	-	-	-	1	1	1	1.8	-	3	3	-	0.19	-	1
Strain, sprain, dislocation-----	-	-	-	15	15	15	26.3	-	19	19	-	2.87	-	55
Unclassified (no data)-----	-	-	-	2	2	2	-	-	17	17	-	.38	-	7
Total or average-----	-	-	-	59	59	59	-	-	23	23	-	11.30	-	261
Total or average, mining-----	18	1	35	763	799	817	-	339	22	175	0.56	24.65	3,332	1,080
MILLS														
Amputation, enucleation-----	1	-	34	-	34	35	2.3	885	-	1,031	.02	.55	96	483
Asphyxiation-----	6	-	-	5	5	11	.7	-	11	3,278	.10	.08	578	1
Crushing, contusion, bruise-----	2	-	-	374	374	376	24.9	-	13	44	.03	6.00	193	76
Burn, scald (except chemical)-----	-	-	1	54	55	55	3.6	300	14	19	-	.88	-	17
Chemical burn-----	-	-	-	17	17	17	1.1	-	13	13	-	.27	-	3
Radiation, radiating substance-----	-	-	-	10	10	10	.7	-	2	2	-	.16	-	(2)
Cut, laceration, puncture-----	-	-	-	167	167	167	11.0	-	13	13	-	2.68	-	34
Dermatitis-----	-	-	-	3	3	3	.2	-	9	9	-	.05	-	(2)
Electric shock-----	-	-	-	1	1	1	.1	-	29	29	-	.02	-	(2)
Foreign body in eye-----	-	-	-	56	56	56	3.7	-	4	4	-	.90	-	4
Fracture-----	1	-	5	173	178	179	11.8	546	50	97	.02	2.86	96	181
Heat exhaustion, sunstroke-----	-	-	-	3	3	3	.2	-	1	1	-	.05	-	(2)
Hernia (inguinal)-----	-	-	9	20	29	29	1.9	50	50	50	-	.47	-	23
Poisoning (systemic)-----	-	-	-	4	4	4	.3	-	4	4	-	.06	-	(2)
Strain, sprain, dislocation-----	-	-	5	540	545	545	36.0	580	19	24	-	8.75	-	209
Silicosis-----	-	1	-	-	1	1	.1	-	-	6,000	-	.02	-	96
Pneumoconiosis (except silicosis)-----	-	-	-	1	1	1	.1	-	12	12	-	.02	-	(2)
Concussion (cerebral)-----	-	-	-	5	5	5	.3	-	38	38	-	.08	-	3
Hernia (except inguinal)-----	-	-	2	4	6	6	.4	122	132	129	-	.10	-	12
Freezing, frostbite, etc.-----	-	-	-	1	1	1	.1	-	14	14	-	.02	-	(2)
Inflammation or irritation of joints, tendons, muscles-----	-	-	-	8	8	8	.5	-	9	9	-	.13	-	1
Unclassified (no data)-----	-	-	-	92	92	92	-	-	20	20	-	1.48	-	30
Total or average, mills-----	10	1	56	1,538	1,595	1,605	-	656	20	83	.16	25.60	963	1,177
Grand total or average-----	28	2	91	2,301	2,394	2,422	-	534	21	114	.30	25.28	1,774	1,143

1/ Number of injuries for which nature of injury is "Unclassified" is excluded in calculating percentages. Therefore, 100 percent for underground is 374; for surface, 71; for open pit, 281; for other surface mining, 57; and for mills, 1,513. Distribution percentages may not add to 100.0 because of independent rounding.

2/ Less than 0.5.

TABLE A-6. - Injury experience and worktime data on nonmetal mines and mills in the United States, by general work location and employment size group, 1970

General work location and employment size group	Injuries			Frequency rates per million man-hours			Severity rates per million man-hours			Active operations	Average men working daily	Average days active	Man-days worked	Man-hours worked
	Fatal	Nonfatal	Total	Fatal	Nonfatal	Total	Fatal	Nonfatal	Total					
Underground mines (includes surface work):														
1-4-----	-	5	5	-	29.35	29.35	-	3,821	3,821	42	128	162	20,757	170,374
5-9-----	1	12	13	2.47	29.64	32.11	14,821	1,907	15,727	33	221	226	49,949	408,834
10-19-----	2	41	43	2.04	41.83	43.87	12,842	1,172	13,444	33	475	258	122,424	980,212
20-34-----	-	59	60	1.02	60.17	61.19	6,119	9,619	15,784	18	337	236	121,131	980,489
35-49-----	1	25	26	1.37	34.14	35.51	8,194	1,790	9,984	7	436	298	94,078	732,257
50-99-----	4	77	81	1.62	31.22	32.84	6,732	2,167	8,909	16	1,065	288	286,170	2,466,180
100-149-----	4	78	82	2.24	43.59	45.83	13,413	1,867	15,473	6	755	300	224,738	1,885,058
150-249-----	-	106	106	-	45.68	45.68	-	1,282	1,282	5	938	300	287,781	2,320,432
250 or more-----	-	39	39	-	24.30	24.30	-	484	484	2	612	326	199,387	1,604,360
Total or average-----	13	442	455	1.14	38.61	39.74	6,813	2,029	8,842	162	4,961	287	1,426,242	11,449,019
Open pit mines:														
1-4-----	1	49	50	.30	14.61	14.91	1,789	803	2,592	1,315	2,341	174	407,378	3,353,465
5-9-----	1	58	59	.43	24.94	25.37	2,580	896	3,476	234	1,478	191	282,744	2,325,368
10-19-----	-	56	56	-	21.38	21.38	-	454	454	92	1,238	257	318,308	2,619,357
20-34-----	2	41	43	1.24	25.47	26.71	7,455	554	8,009	29	771	255	196,942	1,609,615
35-49-----	-	21	21	-	17.72	17.72	-	1,689	1,689	12	485	301	145,991	1,185,058
50-99-----	1	37	38	.37	13.65	14.02	2,214	389	2,603	15	1,090	310	270,292	2,210,292
100-149-----	-	36	36	-	22.24	22.24	-	308	308	6	705	287	202,472	1,618,980
150-249-----	-	-	-	-	-	-	-	-	-	1	170	236	40,063	320,502
Total or average-----	5	298	303	.32	18.93	19.25	1,906	661	2,567	1,704	8,278	233	1,931,761	15,742,637
Other surface mining:														
1-4-----	-	1	1	-	2.47	2.47	-	30	30	112	164	306	50,171	404,548
5-9-----	-	-	-	-	-	-	-	-	-	12	79	269	21,247	170,744
10-19-----	-	1	1	-	3.34	3.34	-	13	13	11	134	279	37,366	299,253
20-34-----	-	1	1	-	7.79	7.79	-	171	171	2	47	342	16,035	128,440
35-49-----	-	17	17	-	40.27	40.27	-	604	604	4	155	340	52,766	422,126
50-99-----	-	13	13	-	16.53	16.53	-	205	205	5	339	290	98,291	786,330
100-149-----	-	12	12	-	7.34	7.34	-	280	280	5	641	319	204,263	1,634,103
150-249-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	14	14	-	10.17	10.17	-	327	327	2	538	320	172,056	1,376,452
Total or average-----	-	59	59	-	11.30	11.30	-	261	261	153	2,097	311	652,215	5,221,996
Total or average, mining-----	18	799	817	.56	24.65	25.21	3,332	1,080	4,412	2,019	15,336	261	4,010,218	32,413,652
Mills:														
1-4-----	2	25	27	2.30	28.69	30.99	13,771	5,838	19,609	233	498	215	107,074	871,369
5-9-----	-	36	36	-	24.24	24.24	-	4,171	4,171	109	718	254	182,361	1,485,122
10-19-----	-	135	135	-	31.54	31.54	-	1,125	1,125	137	1,967	268	526,986	4,279,709
20-34-----	3	261	264	.36	31.55	31.91	2,176	1,579	3,754	141	3,693	279	1,031,044	8,272,965
35-49-----	2	249	251	.29	36.07	36.36	1,738	1,310	3,048	74	3,046	284	865,716	6,903,529
50-99-----	2	442	444	.11	24.56	24.68	667	1,109	1,776	111	7,655	292	2,234,096	17,993,910
100-149-----	1	103	104	.12	12.11	12.23	706	305	1,011	29	3,509	304	1,065,106	8,502,319
150-249-----	-	170	170	-	23.63	23.63	-	563	563	17	3,226	279	899,188	7,192,783
250 or more-----	-	174	174	-	25.62	25.62	-	1,251	1,251	8	2,813	299	840,883	6,791,342
Total or average, mills-----	10	1,595	1,605	.16	25.60	25.77	963	1,177	2,140	859	27,125	286	7,752,454	62,293,048
Grand total or average-----	28	2,394	2,422	.30	25.28	25.57	1,774	1,143	2,917	2,878	42,461	277	11,762,672	94,706,700

TABLE A-7. - Injuries by degree at nonmetal mines and mills in the United States, by State ^{1/}, 1970

State	Injuries											
	At mines						At mills					
	Fatal	Nonfatal				All injuries	Fatal	Nonfatal				All injuries
		Permanent		Temporary total	Total non-fatal			Permanent		Temporary total	Total non-fatal	
		Total	Partial					Total	Partial			
Alabama-----	1	-	-	1	1	2	-	-	3	14	17	17
Arizona-----	-	-	-	2	2	2	-	-	-	3	3	3
Arkansas-----	-	-	-	19	19	19	-	-	-	37	37	37
California-----	1	-	1	55	56	57	-	-	6	207	213	213
Colorado-----	1	-	6	27	33	34	1	-	1	18	19	20
Connecticut-----	-	-	2	1	3	3	1	-	-	3	3	4
Florida-----	-	-	2	10	12	12	1	-	2	29	31	32
Georgia-----	1	-	3	48	51	52	1	-	6	171	177	178
Hawaii-----	-	-	-	3	3	3	-	-	-	2	2	2
Idaho-----	1	-	-	4	4	5	-	-	-	8	8	8
Illinois-----	-	1	1	34	36	36	-	-	2	46	48	48
Indiana-----	-	-	-	1	1	1	-	-	-	11	11	11
Iowa-----	-	-	-	6	6	6	-	-	1	36	37	37
Kansas-----	-	-	-	5	5	5	-	-	-	55	55	55
Kentucky-----	-	-	1	7	8	8	-	-	1	7	8	8
Louisiana-----	5	-	-	55	55	60	1	-	2	40	42	43
Maine-----	-	-	-	1	1	1	-	-	-	2	2	2
Maryland-----	-	-	-	1	1	1	-	-	-	15	15	15
Massachusetts-----	-	-	-	-	-	-	-	-	-	7	7	7
Michigan-----	2	-	-	19	19	21	-	-	1	67	68	68
Minnesota-----	-	-	-	-	-	-	-	-	-	11	11	11
Mississippi-----	-	-	-	5	5	5	-	-	-	28	28	28
Missouri-----	-	-	1	31	32	32	-	-	3	27	30	30
Montana-----	-	-	-	10	10	10	-	-	1	17	18	18
Nevada-----	-	-	3	5	8	8	-	-	3	40	43	43
New Jersey-----	-	-	-	1	1	1	-	-	1	24	25	25
New Mexico-----	2	-	3	144	147	149	-	-	2	36	38	38
New York-----	1	-	-	55	55	56	-	-	4	62	66	66
North Carolina-----	-	-	2	9	11	11	1	1	3	86	90	91
Ohio-----	-	-	3	49	52	52	-	-	1	60	61	61
Oklahoma-----	-	-	1	2	3	3	1	-	1	21	22	23
Oregon-----	-	-	-	3	3	3	-	-	-	1	1	1
Pennsylvania-----	-	-	-	16	16	16	-	-	3	58	61	61
South Carolina-----	-	-	-	1	1	1	-	-	2	60	62	62
South Dakota-----	-	-	-	4	4	4	-	-	1	9	10	10
Tennessee-----	-	-	-	16	16	16	-	-	1	22	23	23
Texas-----	2	-	-	38	38	40	3	-	1	108	109	112
Utah-----	1	-	3	52	55	56	-	-	1	21	22	22
Vermont-----	-	-	-	10	10	10	-	-	-	12	12	12
Virginia-----	-	-	1	1	2	2	-	-	3	29	32	32
West Virginia-----	-	-	-	3	3	3	-	-	-	4	4	4
Wisconsin-----	-	-	-	-	-	-	-	-	-	1	1	1
Wyoming-----	-	-	2	9	11	11	-	-	-	23	23	23
Total-----	18	1	35	763	799	817	10	1	56	1,538	1,595	1,605

^{1/} No injuries were reported at nonmetal mines and mills for States not listed.

TABLE A-8. - Fatal injuries by general work location and main cause at nonmetal mines and mills in the United States, by State *y*, 1970

State	Underground mines								Open pit mines				Total, mining activities	Mills					Grand total	
	Underground				Shaft and slope		Surface		Haulage	Electricity	Machinery	Total, open pit mines		Sliding or falling material or objects	Handling material	Haulage	Machinery	Total, mills		
	Falls of roof or back	Haulage	Machinery	Fires or suffocation from fires	Total, underground	Sliding or falling material or objects	Total, shaft and slope	Machinery												Total, surface at underground
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1		
California-----	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
Colorado-----	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1		
Connecticut-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Florida-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Georgia-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Idaho-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Louisiana-----	4	-	1	-	5	-	-	-	-	1	-	-	-	-	-	-	-	-		
Michigan-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
New Mexico-----	-	-	-	1	2	2	2	-	-	-	-	-	-	-	-	-	-	-		
New York-----	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
North Carolina-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Utah-----	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total-----	6	2	1	1	10	2	2	1	1	13	1	5	1	3	1	1	3	10		
																		28		

y/ No fatal injuries were reported at nonmetal mines and mills for States not listed.

1/ No nonfatal injuries were reported at nonmetal mines and mills for the States not listed.

TABLE A-9. - Nonfatal injuries by general work location and main cause at nonmetal mines and mills in the United States, by State *U*, 1970 - Continued

State	Open pit mines										Other surface mining										Mills										Grand total											
	Falls of face or side	Sliding or falling material	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires	Miscellaneous causes	Total, open pit	Sliding or falling material	Slips or falls of persons	Handling material	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires	Miscellaneous causes	Pneumoconiosis	Total, mills															
Alabama-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	3	1	1	4	1	17														
Arizona-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3															
Arkansas-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5															
California-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	37															
Colorado-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	213															
Connecticut-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	56															
Florida-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19															
Georgia-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3															
Hawaii-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3															
Idaho-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	177															
Illinois-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2															
Indiana-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8															
Iowa-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12															
Kansas-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	37															
Kentucky-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	55															
Louisiana-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8															
Maine-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	42															
Maryland-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16															
Massachusetts-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7															
Michigan-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	68															
Minnesota-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11															
Mississippi-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	28															
Missouri-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	30															
Montana-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18															
Nevada-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	43															
New Jersey-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25															
New Mexico-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	38															
New York-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	121															
North Carolina-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	90															
Ohio-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	113															
Oklahoma-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22															
Oregon-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4															
Pennsylvania-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	61															
South Carolina-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	77															
South Dakota-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	62															
Tennessee-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19															
Texas-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	23															
Utah-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	103															
Vermont-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22															
Virginia-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	77															
West Virginia-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12															
Wisconsin-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	32															
Wyoming-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4															
Total-----	1	11	53	65	34	15	1	51	1	49	1	2	14	298	1	15	17	4	1	5	1	2	2	2	11	59	799	27	281	668	51	24	25	226	6	172	3	1	109	2	1,595	2,394

U No nonfatal injuries were reported at nonmetal mines and mills for the States not listed.

TABLE A-10. - Injuries by general work location and main cause at nonmetal mines and mills in the United States, by degree of injury and mineral industry, 1970

Degree of injury and mineral industry	Underground mines																				
	Underground														Shaft and slope					Total, underground plus total, shaft and slope	
	Falls of roof or back	Falls of face or side	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosives	Electricity	Machinery	Fires or suffocation from fires	Miscellaneous causes	Total, underground	Falls of roof or back	Sliding or falling material or objects	Slips or falls of persons	Striking or bumping against objects		Haulage
Fatal and nonfatal:																					
Clay-----	5	2	-	6	4	1	-	-	4	-	-	1	-	-	23	-	-	-	-	-	-
Gypsum-----	1	-	-	-	1	-	1	-	-	-	-	1	-	1	5	-	2	-	-	1	3
Phosphate rock-----	1	-	-	2	2	-	-	-	2	-	-	3	-	1	11	-	-	-	-	-	8
Potash-----	10	-	3	9	45	3	4	3	25	-	7	11	1	3	124	-	-	-	-	-	11
Salt-----	9	1	2	20	29	4	2	1	15	-	1	13	-	2	99	-	-	-	-	-	124
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99
Miscellaneous nonmetals--	21	2	5	16	34	2	1	2	15	1	1	13	-	2	115	1	-	1	1	-	3
Total-----	47	5	10	53	115	10	8	6	61	1	9	42	1	9	377	1	2	1	1	1	6
Fatal:																					
Clay-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gypsum-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2	2
Phosphate rock-----	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1
Potash-----	1	-	-	-	-	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	2
Salt-----	4	-	-	-	-	-	-	-	-	-	-	1	-	-	5	-	-	-	-	-	5
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals--	1	-	-	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	2
Total-----	6	-	-	-	-	-	-	-	2	-	-	1	1	-	10	-	2	-	-	-	12
Permanent total:																					
Clay-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gypsum-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phosphate rock-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potash-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Salt-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals--	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1
Total-----	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1
Permanent partial:																					
Clay-----	-	-	-	-	-	1	-	-	1	-	-	-	-	-	2	-	-	-	-	-	2
Gypsum-----	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Phosphate rock-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potash-----	-	-	-	-	1	-	1	-	1	-	-	1	-	-	4	-	-	-	-	-	4
Salt-----	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals--	-	-	1	-	1	-	-	-	1	-	-	1	-	-	4	-	-	-	-	-	4
Total-----	-	-	1	-	4	1	1	-	3	-	-	2	-	-	12	-	-	-	-	-	12
Temporary total:																					
Clay-----	5	2	-	6	4	-	-	-	3	-	-	1	-	-	21	-	-	-	-	-	21
Gypsum-----	1	-	-	-	-	-	1	-	-	-	-	1	-	1	4	-	-	-	-	1	5
Phosphate rock-----	1	-	-	2	2	-	-	-	1	-	-	3	-	1	10	-	-	-	-	-	10
Potash-----	9	-	3	9	44	3	3	3	24	-	7	10	-	3	118	-	-	-	-	-	118
Salt-----	5	1	2	20	28	4	2	1	15	-	1	12	-	2	93	-	-	-	-	-	93
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals--	20	2	4	16	33	2	1	2	12	1	1	12	-	2	108	1	-	1	1	-	3
Total-----	41	5	9	53	111	9	7	6	55	1	9	39	-	9	354	1	-	1	1	1	4

TABLE A-10. - Injuries by general work location and main cause at nonmetal mines and mills in the United States, by degree of injury and mineral industry, 1970 - Continued

Degree of injury and minerals industry	Underground mines - continued											Open pit mines													
	Surface										Total, underground														
	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Machinery	Miscellaneous causes	Total, surface		Falls of face or side	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires	Miscellaneous causes	Total, open pit
Fatal and nonfatal:	-	2	-	-	-	-	-	-	-	2	25	-	3	26	33	15	7	-	27	4	28	-	1	7	151
Clay-----	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	7
Gypsum-----	-	-	-	-	-	-	-	-	-	-	11	1	-	5	5	2	-	-	6	-	4	1	-	2	26
Phosphate rock-----	1	10	9	2	2	-	4	1	-	29	153	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Potash-----	-	7	8	-	2	-	4	3	2	26	125	-	-	-	-	-	-	-	-	-	2	-	-	-	3
Salt-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals-----	-	1	5	1	-	1	3	3	1	15	133	-	8	20	26	15	8	1	18	-	14	-	1	5	116
Total-----	1	20	22	3	4	1	11	7	3	72	455	1	11	53	65	34	15	1	52	4	50	1	2	14	303
Fatal:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	-	-	-	4
Clay-----	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gypsum-----	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Phosphate rock-----	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potash-----	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Salt-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals-----	-	-	-	-	-	-	-	1	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total-----	-	-	-	-	-	-	-	1	-	1	13	-	-	-	-	-	-	-	1	3	1	-	-	-	5
Permanent total:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Clay-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gypsum-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phosphate rock-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potash-----	-	-	1	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	1	-	-	-	4
Salt-----	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals-----	-	-	-	-	-	-	-	1	-	1	5	-	2	-	4	-	-	-	3	-	-	-	-	-	9
Total-----	-	-	1	-	-	-	-	1	-	2	14	-	2	1	7	1	-	-	6	-	4	-	-	-	21
Temporary total:	-	2	-	-	-	-	-	-	-	2	23	-	3	26	32	14	7	-	24	1	25	-	1	7	140
Clay-----	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Gypsum-----	-	-	-	-	-	-	-	-	-	-	10	1	-	2	-	2	-	-	1	-	1	-	-	-	21
Phosphate rock-----	1	10	8	2	2	-	4	1	-	28	146	-	-	4	3	2	-	-	5	-	3	1	-	2	61
Potash-----	-	7	8	-	2	-	4	3	2	26	119	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Salt-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	3
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals-----	-	1	5	1	-	1	3	1	1	13	124	-	6	20	22	15	8	1	15	-	14	-	1	5	107
Total-----	1	20	21	3	4	1	11	5	3	69	427	1	9	52	58	33	15	1	45	1	45	1	2	14	277

TABLE A-10. - Injuries by general work location and main cause at nonmetal mines and mills in the United States, by degree of injury and mineral industry, 1970 - Continued

Degree of injury and mineral industry	Other surface mining										Mills																	Grand total
	Sliding or falling material or objects	Slips or falls of persons	Handling material	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery	Suffocation (no flame or smoldering)	Miscellaneous causes	Total, other surface mining	Total, mining activities	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires	Miscellaneous causes	Pneumoconiosis	Total, mills		
Fatal and nonfatal:	-	-	-	-	-	-	-	-	-	-	176	18	139	383	18	12	14	153	4	100	2	1	48	1	893	1,069		
Clay-----	-	-	-	-	-	-	-	-	-	-	15	-	2	4	-	-	-	1	1	1	-	-	-	-	9	24		
Gypsum-----	-	-	-	-	-	-	-	-	-	-	37	-	2	6	-	-	-	2	1	2	-	-	2	-	17	54		
Phosphate rock-----	-	-	-	-	-	-	-	-	-	-	153	-	8	12	1	-	1	3	3	-	-	-	-	-	28	181		
Potash-----	-	-	-	1	-	-	-	-	-	-	129	4	44	97	7	4	2	28	24	-	-	-	-	12	-	222	351	
Salt-----	-	-	-	-	-	-	-	-	-	-	57	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57	
Sulfur-----	1	15	16	3	1	5	1	2	2	11	57	57	-	-	-	-	-	-	40	1	45	1	-	46	1	436	686	
Miscellaneous nonmetals-----	-	-	-	-	-	-	-	-	-	-	1	250	7	86	168	25	8	8	40	1	45	1	-	46	1	436	686	
Total-----	1	15	17	4	1	5	1	2	2	11	59	817	29	281	672	51	24	25	227	6	175	3	1	109	2	1,605	2,422	
Fatal:	-	-	-	-	-	-	-	-	-	-	-	4	-	-	1	-	-	-	-	-	3	-	-	-	-	4	8	
Clay-----	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
Gypsum-----	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2	
Phosphate rock-----	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
Potash-----	-	-	-	-	-	-	-	-	-	-	5	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	6	
Salt-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	3	2	-	1	-	-	-	1	-	-	-	-	-	-	4	7	
Miscellaneous nonmetals-----	-	-	-	-	-	-	-	-	-	-	-	3	2	-	1	-	-	-	1	-	-	-	-	-	-	4	7	
Total-----	-	-	-	-	-	-	-	-	-	-	-	18	2	-	4	-	-	-	1	-	3	-	-	-	-	10	28	
Permanent total:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Clay-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gypsum-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Phosphate rock-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Potash-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Salt-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Miscellaneous nonmetals-----	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	
Total-----	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	
Permanent partial:	-	-	-	-	-	-	-	-	-	-	-	9	-	4	9	1	-	-	7	-	9	-	-	-	-	30	39	
Clay-----	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
Gypsum-----	-	-	-	-	-	-	-	-	-	-	-	4	-	1	1	-	-	-	-	1	-	-	-	-	-	4	8	
Phosphate rock-----	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	1	-	-	-	-	-	1	6	
Potash-----	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	-	-	-	-	2	3	
Salt-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Miscellaneous nonmetals-----	-	-	-	-	-	-	-	-	-	-	14	-	-	5	-	-	-	-	3	-	11	-	-	-	-	19	33	
Total-----	-	-	-	-	-	-	-	-	-	-	-	35	-	5	15	1	-	-	10	1	24	-	-	-	-	56	91	
Temporary total:	-	-	-	-	-	-	-	-	-	-	-	163	18	135	373	17	12	14	146	4	88	2	1	48	1	859	1,022	
Clay-----	-	-	-	-	-	-	-	-	-	-	-	11	-	2	4	-	-	-	1	1	-	-	-	-	-	9	20	
Gypsum-----	-	-	-	-	-	-	-	-	-	-	-	31	-	1	6	-	-	-	2	1	-	-	-	2	-	12	43	
Phosphate rock-----	-	-	-	-	-	-	-	-	-	-	-	146	-	8	12	1	-	1	3	2	-	-	-	-	-	27	173	
Potash-----	-	-	-	1	-	-	-	-	-	-	1	123	4	44	96	7	4	2	28	-	22	-	-	12	-	219	342	
Salt-----	-	-	-	-	-	-	-	-	-	-	-	57	57	-	-	-	-	-	-	-	-	-	-	-	-	-	57	
Sulfur-----	1	15	16	3	1	5	1	2	2	11	57	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57	
Miscellaneous nonmetals-----	-	-	1	-	-	-	-	-	-	-	1	232	5	86	162	25	8	8	36	1	34	1	-	46	-	412	644	
Total-----	1	15	17	4	1	5	1	2	2	11	59	763	27	276	653	50	24	25	216	5	148	3	1	109	1	1,538	2,301	

TABLE A-11. - Injury experience and worktime data by general work location at nonmetal mines and mills in the United States, by mineral industry, 1970

Mineral industry	Fatal						Nonfatal										
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	
	Underground	Surface							Underground	Surface							Total
		Total															
Injuries																	
Clay-----	-	-	-	4	-	4	4	8	23	2	25	147	-	172	889	1,061	
Gypsum-----	1	-	2	2	-	2	2	2	6	-	6	7	-	13	9	22	
Phosphate rock-----	2	-	1	1	-	2	1	3	10	16	10	25	-	35	16	51	
Potash-----	2	-	2	-	-	2	2	6	122	29	151	28	-	151	28	179	
Salt-----	5	-	5	-	-	5	1	6	94	26	120	3	1	124	221	345	
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	57	57	-	57	
Miscellaneous nonmetals-----	2	1	3	-	-	3	4	7	116	14	130	116	1	247	432	679	
Total-----	12	1	13	5	-	18	10	28	371	71	442	298	59	799	1,595	2,394	
Frequency rates per million man-hours																	
Clay-----	-	-	-	0.60	-	0.56	0.14	0.23	44.88	28.46	42.90	22.21	-	23.89	32.17	30.46	
Gypsum-----	3.46	-	2.64	-	-	1.08	-	.39	10.38	-	7.92	6.39	-	7.02	7.01	4.25	
Phosphate rock-----	4.76	-	3.83	.22	-	.61	.19	.29	47.57	-	38.34	5.41	-	7.17	3.01	5.01	
Potash-----	.77	-	.54	-	-	.54	-	.36	47.08	26.80	41.11	-	-	40.99	15.32	32.48	
Salt-----	2.12	-	1.51	-	-	1.25	.13	.50	39.91	27.36	36.30	59.88	-	1.52	27.84	28.86	
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	13.16	-	13.16	-	13.16	
Miscellaneous nonmetals-----	.85	1.94	1.05	-	-	.46	.25	.31	49.28	27.16	45.31	34.52	4.51	38.29	26.56	29.89	
Combined rate-----	1.40	.35	1.14	.32	-	.56	.16	.30	43.14	24.93	38.61	18.93	11.30	24.65	25.60	25.28	
Severity rates per million man-hours																	
Clay-----	-	-	-	3.627	-	3.333	869	1,378	2,207	213	1,966	626	-	735	1,162	1,074	
Gypsum-----	20,769	-	15,845	-	-	6,476	-	2,320	931	-	710	600	-	645	71	277	
Phosphate rock-----	28,543	-	23,001	1,299	-	2,459	1,130	1,767	2,198	-	1,771	203	-	287	303	295	
Potash-----	4,631	-	3,267	-	-	3,258	756	2,177	2,027	1,236	1,794	-	-	1,789	571	1,985	
Salt-----	12,738	-	9,076	-	-	7,475	-	3,012	936	764	886	479	6	737	484	569	
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	311	311	-	311	
Miscellaneous nonmetals-----	5,098	11,638	6,273	-	-	2,790	1,475	1,849	4,170	3,393	4,030	1,383	54	2,515	2,117	2,230	
Combined rate-----	8.372	2.106	6.813	1.906	-	3.332	963	1,774	2,256	1,344	2,029	661	261	1,080	1,177	1,143	
Average men working daily																	
Active operations						Average days active											
Under-ground mines	Open pit mines	Other surface mining	Total mining activities	Mills	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills		
28	1,114	-	1,142	467	259	43	302	3,881	12,612	16,795	237	208	-	210	273		
16	78	-	77	52	298	94	392	570	1,509	2,421	243	258	-	252	270		
4	78	-	82	41	108	27	135	2,035	4,224	4,224	242	280	-	278	323		
11	-	1	12	9	949	394	1,343	-	2,170	2,077	342	328	328	342	313		
16	3	77	96	54	1,067	419	1,486	26	1,791	5,242	276	233	286	278	286		
Sulfur-----	-	19	19	-	-	-	-	1,726	1,726	1,726	-	-	314	314	-		
Miscellaneous nonmetals-----	87	448	56	591	236	234	1,303	1,816	3,207	9,976	274	228	314	249	299		
Total or average-----	162	1,704	153	2,019	859	1,211	4,961	8,278	15,336	42,461	287	233	311	261	286		

TABLE A-11. - Injury experience and worktime data by general work location at nonmetal mines and mills in the United States, by mineral industry, 1970 - Continued

Mineral industry	Man-days worked										Man-hours worked							
	Underground mines				Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	
	Underground		Surface							Total	Underground	Surface						Total
	Underground	Surface	Underground	Surface														
Clay-----	63,118	8,570	71,688	808,399	880,087	3,445,282	4,325,369	512,521	70,262	582,783	6,617,644	27,632,342	7,200,427	34,832,769				
Gypsum-----	72,827	22,567	95,394	134,055	229,449	407,962	637,391	577,797	179,340	757,137	1,095,741	3,318,928	1,853,078	5,172,006				
Phosphate rock-----	26,275	6,331	32,606	569,854	602,460	663,297	1,265,757	210,207	30,647	240,854	4,618,967	5,308,418	4,879,821	10,188,239				
Potash-----	323,884	135,257	459,141	-	460,453	228,419	688,872	2,591,074	1,082,054	3,673,128	50,102	7,827,363	3,683,624	5,510,987				
Salt-----	293,197	116,829	410,026	6,047	497,865	986,087	1,483,952	2,355,119	950,448	3,305,567	50,102	7,939,485	4,013,270	11,952,755				
Sulphur-----	-	-	-	-	541,493	-	541,493	-	-	-	-	-	-	-	-	-	-	
Miscellaneous nonmetals-----	293,208	64,179	357,387	413,406	798,411	2,021,427	2,819,838	2,353,811	515,539	2,869,350	3,360,183	16,266,512	6,451,482	22,717,994				
Total-----	1,072,509	353,733	1,426,242	1,931,761	652,215	4,010,218	7,752,454	11,762,672	8,600,529	2,848,490	11,449,019	15,742,637	5,221,996	62,293,048	94,706,700			

TABLE A-12. - Injury experience and worktime data by general work location at miscellaneous nonmetal mines and mills in the United States, by mineral industry, 1970

Mineral industry	Fatal							Nonfatal										
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total		
	Underground	Surface							Total	Underground	Surface						Total	
Injuries																		
Asbestos-----	-	-	-	-	-	-	-	-	1	-	-	1	4	-	5	16	21	
Barite-----	-	-	-	-	-	-	-	-	14	3	-	17	29	-	46	55	101	
Boron minerals-----	-	-	-	-	-	-	-	-	-	-	-	-	31	-	31	92	123	
Feldspar-----	-	-	-	3	-	-	-	-	-	-	-	-	7	-	7	16	23	
Fluorspar-----	-	1	1	1	-	1	5	62	57	5	9	62	7	7	71	22	93	
Magnesite-----	-	-	-	-	-	-	-	-	-	-	-	-	7	1	8	81	89	
Mica-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
Pumice-----	-	-	-	-	-	-	-	-	-	-	-	-	12	-	12	7	19	
Sodium compounds-----	-	-	-	-	-	-	-	-	5	-	-	5	-	-	5	19	24	
Talc, soapstone, and pyrophyllite-----	1	-	1	-	-	1	2	26	24	2	1	26	1	-	27	39	66	
Other nonmetals y-----	1	-	1	-	-	1	1	19	15	4	16	19	16	-	35	84	119	
Total-----	2	1	3	-	-	3	4	7	116	14	14	130	116	1	247	432	679	

y Not elsewhere classified.

TABLE A-12. ~ Injury experience and worktime data by general work location at miscellaneous nonmetal mines and mills in the United States, by mineral industry, 1970 - Continued

Mineral industry	Fatal					Nonfatal										
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total
	Underground	Surface	Total						Underground	Surface	Total					
				Frequency rates per million man-hours												
Asbestos-----	-	-	-	-	-	-	-	-	36.47	87.32	29.18	18.24	-	19.72	21.74	21.22
Barite-----	-	-	-	-	-	-	-	-	108.99	-	104.41	48.55	-	60.51	41.15	48.17
Boron minerals-----	-	-	-	-	-	-	-	-	-	-	-	76.86	-	73.78	37.36	42.67
Feldspar-----	-	-	-	-	-	-	-	2.49	-	-	-	21.67	-	20.01	18.70	19.08
Fluorspat-----	9.49	1.30	-	1.24	-	.73	-	-	85.49	47.44	80.30	255.40	-	87.94	39.20	67.95
Magnesite-----	-	-	-	-	-	-	-	-	-	-	-	61.73	23.50	51.30	31.93	33.06
Mica-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.83	-
Pumice-----	-	-	-	-	-	-	-	-	-	-	-	30.14	-	30.14	26.38	28.64
Sodium compounds-----	-	-	-	-	-	-	-	-	7.15	-	5.90	-	-	5.74	9.78	8.53
Talc, soapstone, and pyrophyllite-----	2.97	2.34	-	1.54	-	.81	-	-	71.40	22.11	60.95	4.47	-	41.50	31.46	34.92
Other nonmetals 1) -----	2.13	1.67	-	.59	-	.18	-	-	32.02	30.74	31.74	16.94	-	20.79	21.62	21.37
Combined rate-----	.85	1.94	1.05	.46	-	.31	.25	.46	49.28	27.16	45.31	34.32	4.51	38.29	26.56	29.89
Severity rates per million man-hours																
Asbestos-----	-	-	-	-	-	-	-	-	401	4,104	321	447	-	430	2,031	1,621
Barite-----	-	-	-	-	-	-	-	-	3,347	-	3,507	1,123	-	1,634	4,250	3,301
Boron minerals-----	-	-	-	-	-	-	-	-	-	-	-	687	-	659	1,071	1,011
Feldspar-----	-	-	-	-	-	-	-	-	-	-	-	1,793	-	1,655	7,302	5,663
Fluorspat-----	56,925	7,771	-	7,432	-	4,384	-	-	11,613	11,338	11,576	20,943	282	11,985	854	7,420
Magnesite-----	-	-	-	-	-	-	-	-	-	-	-	16,067	-	11,760	2,149	2,706
Mica-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	5
Pumice-----	-	-	-	-	-	-	-	-	-	-	-	477	-	477	445	464
Sodium compounds-----	-	-	-	-	-	-	-	-	304	-	251	-	-	244	494	417
Talc, soapstone, and pyrophyllite-----	17,850	14,065	-	9,223	-	4,840	-	-	2,419	254	1,960	18	-	1,291	4,393	3,325
Other nonmetals 1) -----	12,806	10,022	-	3,564	-	1,078	-	-	1,291	2,997	1,662	284	-	750	1,526	1,291
Combined rate-----	5,098	11,638	6,273	-	-	1,475	1,849	2,790	4,170	3,393	4,030	1,383	54	2,515	2,117	2,230
Average men working daily																
Average days active																
Under-ground mines	Open pit mines	Other surface mining	Total mining activities	Mills	Underground mines	Surface	Total	Open pit mines	Other surface mining	Total mining activities	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills
2	9	-	11	7	12	3	15	109	-	124	324	448	286	251	251	284
2	40	-	42	40	63	18	81	295	-	376	617	993	251	247	248	265
1	3	1	5	14	3	3	6	147	8	161	1,022	1,186	4	342	326	300
2	86	-	88	14	14	-	14	193	-	207	346	353	260	103	206	307
26	11	-	37	37	322	55	377	37	-	414	1,418	1,418	256	246	258	305
4	9	-	13	12	-	-	-	35	18	53	1,064	1,064	-	189	189	273
28	16	-	28	16	6	-	6	6	-	12	204	204	-	163	163	205
4	128	-	128	34	286	59	345	307	-	307	773	1,080	307	282	305	336
Talc, soapstone, and pyrophyllite-----	54	-	74	29	164	40	204	148	-	332	566	898	255	188	227	275
Other nonmetals 1) -----	30	84	42	156	203	56	261	460	52	773	1,547	2,320	287	335	269	312
Total or average-----	87	448	56	591	1,069	234	1,303	1,816	88	3,207	6,769	9,976	274	314	249	299

1/ Not elsewhere classified.

TABLE A-12. - Injury experience and worktime data by general work location at miscellaneous nonmetal mines and mills in the United States, by mineral industry, 1970 - Continued

Mineral industry	Man-days worked										Man-hours worked					
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total
	Underground	Surface	Total						Underground	Surface	Total					
Asbestos-----	3,427	857	4,284	27,382	-	31,666	91,997	123,663	27,418	6,854	34,272	219,284	-	253,556	736,000	989,556
Barite-----	16,057	4,295	20,352	72,972	-	93,244	163,779	257,103	128,457	34,358	162,815	597,376	-	760,191	1,336,436	2,096,627
Boron minerals-----	3,360	12	3,372	50,311	2,080	52,422	307,784	360,206	72	96	168	403,348	16,637	420,153	2,462,274	2,882,427
Fluorspat-----	83,360	13,173	96,533	59,259	-	52,389	106,197	148,786	26,874	-	26,874	322,993	-	349,867	853,360	1,203,427
Fluorapat-----	-	-	-	13,510	5,319	10,822	69,352	110,383	666,731	105,401	772,132	135,239	-	807,371	361,217	1,368,588
Magnesite-----	-	-	-	11,903	-	11,903	35,863	35,863	-	-	-	110,272	-	135,235	2,538,447	2,692,402
Mica-----	-	-	-	50,083	-	50,083	32,780	82,863	699,592	148,241	847,833	398,117	-	1,095,950	346,256	1,442,206
Pumice-----	-	-	-	50,083	-	50,083	32,780	82,863	699,592	148,241	847,833	398,117	-	1,095,950	346,256	1,442,206
Sodium compounds-----	87,450	18,530	105,980	180	2,816	108,976	242,857	351,833	699,592	148,241	847,833	1,440	22,528	871,801	1,942,863	2,814,666
Talc, soapstone, and pyrophyllite-----	40,989	11,046	52,035	27,842	-	79,877	150,293	230,170	336,138	90,463	426,601	223,957	-	650,558	1,239,597	1,890,155
Other nonmetals ^{1/} -----	58,576	16,266	74,842	115,685	17,403	207,930	483,372	691,302	468,529	130,126	598,655	944,755	140,231	1,683,641	3,880,739	5,568,380
Total-----	293,208	64,179	357,387	413,406	27,618	798,411	2,021,427	2,819,838	2,353,811	515,539	2,869,350	3,360,183	221,949	6,451,482	16,266,312	22,717,994

^{1/} Not elsewhere classified.

TABLE A-13. - Injury experience and worktime data by general work location at clay mines and mills in the United States, by State, 1970 - Continued

State	Fatal					Nonfatal					Grand total			
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Open pit mines	Other surface mining		Total mining activities	Mills	Grand total
	Underground mines		Total											
	Underground	Surface												
Severity rates per million man-hours														
Alabama-----	-	-	-	27,518	-	27,518	5,336	-	-	18	-	18	609	494
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	185	110
Arkansas-----	-	-	-	-	-	-	-	-	-	143	-	143	574	536
California-----	-	-	-	-	-	-	-	-	-	696	-	696	1,126	1,025
Colorado-----	-	-	-	-	-	-	22,234	21,724	-	191	-	4,260	1,445	2,824
Connecticut-----	-	-	-	-	-	-	-	-	-	145	-	145	-	75
Delaware-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida-----	-	-	-	-	-	-	-	-	-	71	-	308	265	265
Georgia-----	-	-	-	4,164	-	4,164	744	-	-	766	-	766	1,262	1,173
Hawaii-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Illinois-----	-	-	-	-	-	-	-	-	-	28	-	28	1,074	507
Indiana-----	-	-	-	-	-	-	-	-	-	142	-	142	896	767
Iowa-----	-	-	-	-	-	-	-	-	-	1,072	-	1,072	921	948
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	1,651	1,447
Kentucky-----	-	-	-	-	-	-	-	-	-	574	-	574	1,944	1,273
Louisiana-----	-	-	-	-	-	-	-	-	-	779	-	779	2,311	1,349
Maine-----	-	-	-	-	-	-	15,451	-	-	192	-	192	900	782
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	2,425	2,425
Massachusetts-----	-	-	-	-	-	-	-	-	-	155	-	155	652	626
Michigan-----	-	-	-	-	-	-	-	-	-	-	-	-	218	218
Minnesota-----	-	-	-	-	-	-	-	-	-	336	-	336	384	374
Mississippi-----	-	-	-	-	-	-	-	-	-	1,412	-	1,412	34	923
Missouri-----	-	-	-	-	-	-	-	-	-	2,024	-	2,024	207	1,089
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nevada-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey-----	-	-	-	-	-	-	-	-	-	261	-	261	1,057	946
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	-	860	751
New York-----	-	-	-	-	-	-	-	-	-	872	-	872	1,442	1,343
North Carolina-----	-	-	-	-	-	-	-	-	-	557	-	557	2,498	2,207
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	-	-	-	-	-	-	-	2,510	-	1,774	729	1,001
Oklahoma-----	-	-	-	-	-	-	10,126	-	-	1,807	-	1,807	1,192	1,235
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	242	148
Pennsylvania-----	-	-	-	-	-	-	-	3,154	-	558	-	1,143	2,138	1,890
South Carolina-----	-	-	-	-	-	-	-	-	-	-	-	-	816	719
South Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	2,927	1,832
Tennessee-----	-	-	-	-	-	-	-	-	-	532	-	532	1,406	1,132
Texas-----	-	-	-	-	-	30,412	7,609	-	-	124	-	124	935	799
Utah-----	-	-	-	-	-	-	-	1,283	6,466	1,245	-	1,322	277	1,162
Vermont-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia-----	-	-	-	-	-	-	-	-	-	-	-	-	2,073	1,823
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia-----	-	-	-	-	-	-	-	-	-	573	-	573	55	133
Wisconsin-----	-	-	-	-	-	-	-	239	-	-	-	-	2,550	2,454
Wyoming-----	-	-	-	-	-	-	-	-	-	75	-	75	305	245
Combined rate-----	-	-	-	3,627	-	3,333	1,378	2,207	213	626	-	735	1,162	1,074

TABLE A-13. - Injury experience and worktime data by general work location at clay mines and mills in the United States, by State, 1970 - Continued

State	Active operations				Average men working daily							Average days active						
	Under-ground mines	Open pit mines	Other surface mining	Total mining activities	Mills	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills
						Underground	Surface	Total										
Alabama-----	-	39	-	39	24	-	-	-	133	-	133	-	201	-	201	-	201	254
Arizona-----	-	10	-	10	2	-	-	-	30	-	30	-	190	-	190	-	190	246
Arkansas-----	-	26	-	26	8	-	-	-	61	-	61	-	152	-	152	-	152	262
California-----	1	56	-	57	21	3	3	6	156	-	162	181	141	-	142	-	142	240
Colorado-----	7	51	-	58	6	24	2	26	124	-	130	133	106	-	110	-	110	273
Connecticut-----	-	4	-	4	1	-	-	-	11	-	11	-	220	-	220	-	220	145
Delaware-----	-	1	-	1	1	-	-	-	1	-	1	-	313	-	313	-	313	313
Florida-----	-	14	-	14	7	-	-	-	102	-	102	-	271	-	271	-	271	303
Georgia-----	-	65	-	65	38	-	-	-	631	-	631	-	2,690	-	2,690	-	2,690	308
Hawaii-----	-	1	-	1	1	-	-	-	1	-	1	-	128	-	128	-	128	260
Idaho-----	-	9	-	9	1	-	-	-	15	-	15	-	139	-	139	-	139	312
Illinois-----	-	28	-	28	19	-	-	-	83	-	83	-	684	-	684	-	684	211
Indiana-----	1	28	-	29	11	1	-	1	65	-	66	38	198	-	196	-	196	283
Iowa-----	-	19	-	19	16	-	-	-	63	-	63	-	260	-	260	-	260	249
Kansas-----	-	18	-	18	6	-	-	-	58	-	58	-	168	-	168	-	168	287
Kentucky-----	-	46	-	46	10	-	-	-	125	-	125	-	170	-	170	-	170	317
Louisiana-----	-	13	-	13	6	-	-	-	64	-	64	-	314	-	314	-	314	262
Maine-----	-	6	-	6	1	-	-	-	31	-	31	-	156	-	156	-	156	245
Maryland-----	-	11	-	11	9	-	-	-	30	-	30	-	216	-	216	-	216	248
Massachusetts-----	-	3	-	3	1	-	-	-	15	-	15	-	204	-	204	-	204	331
Minnesota-----	-	8	-	8	7	-	-	-	23	-	23	-	173	-	173	-	173	259
Mississippi-----	-	38	-	38	20	-	-	-	161	-	161	-	342	-	342	-	342	285
Missouri-----	-	89	-	89	5	-	-	-	216	-	216	-	184	-	184	-	184	273
Montana-----	-	10	-	10	3	-	-	-	51	-	51	-	80	-	80	-	80	271
Nebraska-----	-	4	-	4	3	-	-	-	7	-	7	-	213	-	213	-	213	236
Nevada-----	1	2	-	3	2	3	3	6	2	-	8	25	14	-	14	-	22	-
New Hampshire-----	-	3	-	3	2	-	-	-	6	-	6	-	94	-	94	-	94	268
New Jersey-----	-	10	-	10	7	-	-	-	38	-	38	-	201	-	201	-	201	256
New Mexico-----	-	5	-	5	3	-	-	-	11	-	11	-	174	-	174	-	174	247
New York-----	-	14	-	14	11	-	-	-	90	-	90	-	186	-	186	-	186	290
North Carolina-----	-	44	-	44	21	-	-	-	142	-	142	-	221	-	221	-	221	229
North Dakota-----	-	3	-	3	4	-	-	-	5	-	5	-	22	-	22	-	22	90
Ohio-----	5	108	-	113	35	80	8	88	265	-	273	-	188	-	188	-	188	259
Oklahoma-----	-	14	-	14	8	-	-	-	34	-	34	-	231	-	231	-	231	238
Oregon-----	1	14	-	15	24	4	2	6	275	-	281	104	175	-	175	-	175	232
Pennsylvania-----	9	62	-	71	28	60	17	77	301	-	301	241	213	-	213	-	213	256
South Carolina-----	-	45	-	45	22	-	-	-	774	-	774	-	285	-	285	-	285	272
South Dakota-----	-	3	-	3	1	-	-	-	896	-	896	-	265	-	265	-	265	273
Tennessee-----	-	18	-	18	16	-	-	-	102	-	102	-	245	-	245	-	245	272
Texas-----	-	85	-	85	38	-	-	-	106	-	106	-	228	-	228	-	228	272
Utah-----	1	16	-	17	2	54	1	55	75	-	130	15	145	-	145	-	145	330
Vermont-----	-	1	-	1	1	-	-	-	2	-	2	-	75	-	75	-	75	301
Virginia-----	-	21	-	21	12	-	-	-	45	-	45	-	207	-	207	-	207	301
Washington-----	-	13	-	13	8	-	-	-	27	-	27	-	76	-	76	-	76	208
West Virginia-----	2	6	-	6	2	30	7	37	15	-	52	283	212	-	212	-	212	22
Wisconsin-----	-	2	-	2	6	-	-	-	6	-	6	-	22	-	22	-	22	126
Wyoming-----	-	20	-	20	12	-	-	-	127	-	127	-	214	-	214	-	214	295
Total or average-----	28	1,114	-	1,142	467	259	43	302	3,881	-	4,183	237	208	-	210	-	210	273

TABLE A-13. - Injury experience and worktime data by general work location at clay mines and mills in the United States, by State, 1970 - Continued

State	Man-days worked						Man-hours worked									
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total
	Underground		Total						Underground	Surface	Total					
	Underground	Surface		Total	Underground	Surface	Total									
Alabama-----	-	-	-	26,697	-	26,697	112,872	139,569	-	-	-	218,036	-	218,036	906,332	1,124,368
Arizona-----	-	-	-	5,714	-	5,714	8,110	13,824	-	-	-	44,512	-	44,512	64,880	109,392
Arkansas-----	-	-	-	9,262	-	9,262	98,851	108,113	-	-	-	76,902	-	76,902	792,890	869,792
California-----	562	526	1,088	21,937	-	23,025	80,675	103,700	4,494	4,205	8,699	176,844	-	185,543	662,453	847,996
Colorado-----	3,192	260	3,452	13,099	-	16,551	17,211	33,762	25,524	2,060	27,584	104,587	-	132,171	137,685	269,856
Connecticut-----	-	-	-	2,424	-	2,424	3,190	5,614	-	-	-	20,639	-	20,639	19,140	39,779
Delaware-----	-	-	-	313	-	313	313	626	-	-	-	2,504	-	2,504	5,008	5,008
Florida-----	-	-	-	27,656	-	27,656	78,693	106,349	-	-	-	226,275	-	226,275	629,550	855,825
Georgia-----	-	-	-	176,303	-	176,303	827,303	1,003,606	-	-	-	1,440,952	-	1,440,952	6,619,255	8,060,207
Hawaii-----	-	-	-	128	-	128	1,040	1,168	-	-	-	1,020	-	1,020	8,320	9,340
Idaho-----	-	-	-	2,079	-	2,079	1,872	3,951	-	-	-	16,632	-	16,632	14,900	31,532
Illinois-----	-	-	-	17,528	-	17,528	151,914	169,442	-	-	-	141,714	-	141,714	1,248,751	1,390,465
Indiana-----	38	-	38	12,918	-	12,918	61,620	74,538	225	-	225	98,357	-	98,582	477,434	576,016
Iowa-----	-	-	-	16,410	-	16,410	76,650	93,060	-	-	-	134,372	-	134,372	617,992	752,364
Kansas-----	-	-	-	6,664	-	6,664	48,159	54,823	-	-	-	51,695	-	51,695	366,988	418,683
Kentucky-----	-	-	-	21,210	-	21,210	22,507	43,717	-	-	-	172,538	-	172,538	180,054	352,592
Louisiana-----	-	-	-	20,098	-	20,098	28,341	48,439	-	-	-	161,599	-	161,599	226,730	388,329
Maine-----	-	-	-	4,832	-	4,832	4,662	9,494	-	-	-	38,535	-	38,535	37,300	75,835
Maryland-----	-	-	-	6,471	-	6,471	32,182	38,653	-	-	-	52,009	-	52,009	259,947	311,956
Massachusetts-----	-	-	-	3,060	-	3,060	15,241	18,301	-	-	-	25,267	-	25,267	121,926	147,193
Michigan-----	-	-	-	3,971	-	3,971	72,266	76,237	-	-	-	32,246	-	32,246	578,388	610,634
Minnesota-----	-	-	-	2,097	-	2,097	33,394	35,491	-	-	-	16,776	-	16,776	267,169	283,945
Mississippi-----	-	-	-	27,864	-	27,864	97,523	125,387	-	-	-	223,004	-	223,004	788,828	1,011,832
Missouri-----	-	-	-	39,794	-	39,794	22,362	62,156	-	-	-	323,005	-	323,005	177,393	500,398
Montana-----	-	-	-	6,556	-	6,556	7,850	14,406	-	-	-	59,293	-	59,293	62,801	122,094
Nebraska-----	-	-	-	1,493	-	1,493	946	2,439	-	-	-	12,468	-	12,468	7,620	20,088
Nevada-----	75	75	150	28	-	178	-	178	600	600	1,200	224	-	1,424	1,424	20,088
New Hampshire-----	-	-	-	561	-	561	6,974	7,535	-	-	-	4,486	-	4,486	55,792	60,278
New Jersey-----	-	-	-	7,621	-	7,621	47,419	55,040	-	-	-	61,407	-	61,407	379,349	440,756
New Mexico-----	-	-	-	1,912	-	1,912	13,075	14,987	-	-	-	15,296	-	15,296	104,600	119,896
New York-----	-	-	-	16,769	-	16,769	78,971	95,740	-	-	-	134,161	-	134,161	637,178	771,339
North Carolina-----	-	-	-	31,452	-	31,452	179,149	210,601	-	-	-	255,076	-	255,076	1,447,771	1,702,847
North Dakota-----	-	-	-	112	-	112	1,083	1,195	-	-	-	894	-	894	8,664	9,558
Ohio-----	19,340	1,918	21,258	49,941	-	71,199	207,784	278,983	154,800	15,346	170,146	410,424	-	580,570	1,653,252	2,233,822
Oklahoma-----	-	-	-	5,533	-	5,533	71,033	76,566	-	-	-	41,502	-	41,502	551,046	592,548
Oregon-----	466	160	626	5,239	-	5,865	9,280	15,145	3,728	1,280	5,008	42,104	-	47,112	74,240	121,352
Pennsylvania-----	15,299	3,244	18,543	47,691	-	66,234	206,079	272,313	129,974	27,716	157,690	392,664	-	550,334	1,651,302	2,201,636
South Carolina-----	-	-	-	27,177	-	27,177	208,819	235,996	-	-	-	226,823	-	226,823	1,675,752	1,902,575
South Dakota-----	-	-	-	11,386	-	11,386	19,049	30,435	-	-	-	91,089	-	91,089	152,390	243,479
Tennessee-----	-	-	-	25,029	-	25,029	56,723	81,762	-	-	-	210,617	-	210,617	462,262	672,879
Texas-----	-	-	-	47,896	-	47,896	242,663	290,559	-	-	-	394,576	-	394,576	1,970,930	2,365,506
Utah-----	15,779	295	16,074	11,447	-	27,826	4,957	32,478	126,238	2,320	128,558	91,576	-	220,134	39,656	259,790
Vermont-----	-	-	-	150	-	150	-	150	-	-	-	900	-	900	569,313	647,300
Virginia-----	-	-	-	9,317	-	9,317	71,896	81,213	-	-	-	77,987	-	77,987	16,699	94,612
Washington-----	-	-	-	2,055	-	2,055	25,187	26,055	-	-	-	16,659	-	16,659	200,896	217,551
West Virginia-----	8,367	2,092	10,459	3,181	-	13,640	38,827	36,827	66,938	16,735	83,673	24,428	-	108,101	68,430	176,531
Wisconsin-----	-	-	-	130	-	130	1,130	1,260	-	-	-	24,648	-	24,648	16,470	41,118
Wyoming-----	-	-	-	27,232	-	27,232	87,494	114,726	-	-	-	252,306	-	252,306	704,249	956,555
Total-----	63,118	8,570	71,688	808,399	-	880,087	3,445,282	4,325,369	512,521	70,262	582,783	6,617,644	-	7,200,427	27,632,342	34,832,769

TABLE A-14. - Injury experience and worktime data by general work location at gypsum mines and mills in the United States, by State, 1970 - Continued

State	Fatal										Nonfatal									
	Underground mines					Open pit mines					Underground mines					Open pit mines				
	Underground	Surface		Total	Total mining activities	Other surface mining	Open pit mines	Mills	Grand total	Severity rates per million man-hours	Underground	Surface		Total	Total mining activities	Other surface mining	Open pit mines	Mills	Grand total	Severity rates per million man-hours
		Underground	Surface									Underground	Surface							
Arizona-----	4	3	-	-	-	-	13	46	13	34	146	-	-	-	-	-	-	-	-	-
Arkansas-----	3	1	-	-	-	-	46	42	11	11	46	-	-	-	-	-	-	-	-	-
California-----	9	5	-	-	-	-	42	42	43	43	232	-	-	-	-	-	-	-	-	-
Colorado-----	3	2	-	-	-	-	11	11	35	35	107	-	-	-	-	-	-	-	-	-
Indiana-----	2	2	34	3	43	9	80	80	10	10	66	-	-	-	-	-	-	-	-	-
Iowa-----	5	5	12	6	23	17	10	10	157	157	2	-	-	-	-	-	-	-	-	-
Kansas-----	3	2	-	-	-	-	69	69	32	32	158	-	-	-	-	-	-	-	-	-
Louisiana-----	1	2	62	26	88	4	29	29	9	9	47	-	-	-	-	-	-	-	-	-
Michigan-----	9	1	3	-	4	3	4	4	128	128	53	-	-	-	-	-	-	-	-	-
Minnesota-----	6	3	4	-	7	4	9	9	25	25	15	-	-	-	-	-	-	-	-	-
Nevada-----	5	3	-	-	-	-	9	9	67	67	84	-	-	-	-	-	-	-	-	-
New Mexico-----	4	4	97	31	128	3	8	8	100	100	168	-	-	-	-	-	-	-	-	-
New York-----	2	4	16	3	17	-	100	100	15	15	63	-	-	-	-	-	-	-	-	-
Ohio-----	7	3	-	-	-	-	15	15	69	69	2	-	-	-	-	-	-	-	-	-
Oklahoma-----	8	6	-	-	-	-	2	2	14	14	86	-	-	-	-	-	-	-	-	-
Texas-----	1	2	55	14	69	-	2	2	912	912	1,509	-	-	-	-	-	-	-	-	-
Utah-----	1	-	-	-	-	-	14	14	520	520	392	94	298	392	94	298	392	520	520	520
Virginia-----	1	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-
Washington-----	1	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming-----	3	3	-	-	-	-	14	14	-	-	86	-	-	-	-	-	-	-	-	-
Total or average-----	77	52	298	94	392	94	520	520	912	912	1,509	2,421	2,421	2,421	2,421	2,421	2,421	2,421	2,421	2,421

TABLE A-14. - Injury experience and worktime data by general work location at gypsum mines and mills in the United States, by State, 1970 - Continued

State	Man-days worked					Man-hours worked											
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	
	Underground		Total						Underground	Surface	Total						
	Underground	Surface	Total														
Arizona-----	-	-	-	3,111	-	3,111	8,697	11,808	-	-	-	24,838	-	-	24,838	85,694	110,532
Arkansas-----	-	-	-	11,110	-	11,110	36,500	47,610	-	-	-	89,670	-	-	89,670	291,385	381,055
California-----	-	-	-	12,025	-	12,025	16,257	28,282	-	-	-	108,413	-	-	108,413	131,014	239,427
Colorado-----	-	-	-	1,831	-	1,831	11,181	13,012	-	-	-	14,646	-	-	14,646	89,451	104,097
Indiana-----	9,187	2,296	11,483	-	-	11,483	79,097	90,580	74,699	18,674	93,373	189,982	18,674	93,373	222,436	632,772	726,145
Iowa-----	3,245	811	4,056	-	-	27,803	11,498	39,301	27,803	6,491	32,454	9,432	32,454	22,436	91,989	314,425	314,425
Kansas-----	4,297	1,980	6,277	-	-	27,955	35,436	35,436	34,375	15,838	50,213	21,600	50,213	59,845	223,645	283,490	283,490
Louisiana-----	-	-	-	2,700	-	2,700	21,404	24,104	24,104	-	-	21,600	-	-	205,396	226,996	226,996
Michigan-----	12,849	3,499	16,348	18,431	-	34,779	18,376	53,155	99,890	27,529	127,419	147,446	127,419	274,865	147,010	421,875	421,875
Montana-----	1,024	-	1,024	-	-	700	40,901	46,954	8,372	-	8,372	48,074	-	-	8,372	14,344	14,344
Nevada-----	45	-	45	6,008	-	6,053	9,176	46,954	360	-	360	48,074	-	-	48,434	329,566	378,000
New Mexico-----	-	-	-	1,139	-	1,139	10,618	12,756	6,053	-	6,053	9,112	-	-	9,112	64,296	73,408
New York-----	22,686	9,108	31,794	-	-	31,794	10,618	42,412	177,706	71,900	249,606	15,168	71,900	249,606	84,696	334,304	334,304
Ohio-----	4,148	1,037	5,185	17,707	-	7,081	4,528	11,609	33,667	8,417	42,084	15,168	42,084	57,252	36,675	93,927	93,927
Oklahoma-----	-	-	-	17,707	-	17,707	21,324	39,031	33,667	8,417	42,084	15,168	42,084	142,203	170,589	312,792	312,792
Texas-----	-	-	-	26,248	-	26,248	46,800	73,048	-	-	-	219,770	-	-	219,770	376,221	595,991
Utah-----	-	-	-	3,451	-	3,451	17,657	21,108	-	-	-	27,613	-	-	27,613	141,256	168,869
Virginia-----	15,346	3,836	19,182	-	-	19,182	17,657	19,182	122,765	30,691	153,456	720	-	-	153,456	-	153,456
Washington-----	-	-	-	90	-	90	-	90	-	-	-	720	-	-	720	-	-
Wyoming-----	-	-	-	3,357	-	3,357	26,412	29,769	-	-	-	26,854	-	-	26,854	211,299	238,153
Total-----	72,827	22,567	95,394	134,055	-	229,449	407,942	637,391	577,797	179,540	757,337	1,095,741	179,540	1,853,078	3,318,928	5,172,006	5,172,006

TABLE A-15. - Injury experience and worktime data by general work location at phosphate rock mines and mills in the United States, by State, 1970

State	Fatal						Nonfatal						Grand total	
	Underground mines			Open pit mines	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Total mining activities		Mills
	Underground	Surface	Total					Underground	Surface	Total				
Injuries														
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Carolina-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	1	-	1	-	2	1	-	1	6	6	1	7	1	7
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total-----	1	-	1	-	2	3	1	2	10	-	25	10	35	51

TABLE A-15. - Injury experience and worktime data by general work location at phosphate rock mines and mills in the United States, by State, 1970 - Continued

State	Fatal						Nonfatal									
	Underground mines		Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	
	Underground	Surface						Total	Underground	Surface						Total
Frequency rates per million man-hours																
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	0.13	-	-	-	3.48	-	3.48	1.77	2.47	-
Florida-----	-	-	-	-	-	-	1.51	-	-	-	4.98	-	4.98	16.81	6.05	-
Idaho-----	-	-	-	1.66	1.66	-	-	-	-	-	-	-	-	26.07	25.99	-
Montana-----	-	-	-	-	-	-	-	29.50	-	-	26.21	-	-	10.04	4.70	-
North Carolina-----	-	-	-	-	-	-	-	-	-	-	10.04	-	-	16.57	4.70	-
Tennessee-----	-	-	-	-	-	-	-	-	-	-	-	-	-	30.51	14.38	-
Utah-----	13.40	-	9.24	-	5.08	-	3.76	80.39	-	-	55.44	-	-	14.14	15.99	-
Wyoming-----	-	-	-	-	-	-	-	-	-	-	14.14	-	-	14.14	15.99	-
Combined rate-----	4.76	-	3.83	.22	.41	-	.29	47.57	-	-	38.34	5.41	-	7.17	3.01	5.01
Severity rates per million man-hours																
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	1,325	780	-	-	-	174	-	174	129	148
Florida-----	-	-	-	-	-	-	-	9,070	-	-	-	56	-	56	353	83
Idaho-----	-	-	-	9,966	9,966	-	-	-	-	-	1,107	-	-	1,101	4,465	1,783
Montana-----	-	-	-	-	-	-	-	-	1,247	-	-	-	-	1,582	2,067	1,832
North Carolina-----	-	-	-	-	-	-	-	-	-	-	1,582	-	-	62	1,411	475
Tennessee-----	-	-	-	-	-	-	-	-	-	-	-	-	-	1,490	849	1,322
Utah-----	80,391	-	55,444	-	30,507	-	22,539	3,926	-	-	2,707	85	-	85	176	151
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined rate-----	28,543	-	23,001	1,299	2,459	-	1,130	1,767	2,198	-	1,771	203	-	287	303	295
Average men working daily																
Average days active																
Nines	Mills	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	
		Underground	Surface	Total												
1	-	-	-	-	2	-	2	-	2	-	159	-	159	-	-	-
1	-	-	-	-	3	-	3	-	3	-	267	-	267	-	-	-
25	27	-	-	-	1,343	1,743	1,343	1,743	3,086	-	295	-	295	237	325	201
4	2	-	-	-	310	37	310	37	347	-	237	-	237	234	232	201
1	1	72	9	81	82	71	82	71	153	236	300	-	300	366	364	364
40	1	-	-	-	68	83	68	83	151	-	295	-	295	237	232	201
5	2	36	18	54	232	27	232	27	259	250	291	-	291	237	232	201
3	1	-	-	-	38	64	38	64	102	-	232	-	232	232	232	201
82	41	108	27	135	2,035	-	2,170	2,054	4,224	242	280	-	278	323	323	323
Total or average-----																

TABLE A-16. - Injury experience and worktime data by general work location at potash mines and mills in the United States, by State, 1970 - Continued

State	Active operations		Average men working daily							Average days active						
	Mines	Mills	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills	Grand total
			Underground	Surface	Total											
New Mexico----- Utah----- Total or average-----	10 2 12	7 2 9	884 65 949	359 35 394	1,243 100 1,343	- - -	- 4 4	1,243 104 1,347	646 84 730	1,889 188 2,077	349 252 342	- - -	- 328 328	349 255 342	319 263 313	
Man-hours worked																
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total
	Underground	Surface	Total						Underground	Surface	Total					
	New Mexico----- Utah----- Total-----	307,811 16,073 323,884	126,118 9,139 135,257	433,929 25,212 459,141	- - -	- 1,312 1,312	433,929 26,524 460,453	206,340 22,079 228,419	640,269 48,603 688,872	2,462,485 128,589 2,591,074	1,008,939 73,115 1,082,054	3,471,424 201,704 3,673,128	- - -	- 10,496 10,496	3,471,424 212,200 3,683,624	1,650,729 176,634 1,827,363

TABLE A-17. - Injury experience and worktime data by general work location at salt mines and mills in the United States, by State, 1970

State	Fatal					Nonfatal										Grand total
	Underground mines			Open pit mines	Other surface mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining activities	Total mining activities			
	Underground	Surface	Total					Underground	Surface	Total						
	Underground	Surface	Total	Open pit mines	Other surface mining activities	Mills	Grand total	Underground	Surface	Total	Open pit mines	Other surface mining activities	Total mining activities	Mills		
Injuries																
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana-----	5	5	5	5	5	5	5	15	1	16	3	3	16	20	37	40
Michigan-----	-	-	-	-	-	-	-	8	8	16	-	-	16	16	54	70
Nevada-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New York-----	-	-	-	-	-	-	-	29	10	39	-	-	39	33	72	72
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	-	-	-	-	-	36	4	40	-	-	40	28	68	68
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas-----	-	-	-	-	-	1	1	3	3	6	-	1	7	2	9	9
Utah-----	-	-	-	-	-	-	-	-	-	-	-	1	1	15	16	16
Virginia-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
West Virginia-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total-----	5	-	5	-	5	1	6	94	26	120	3	1	124	221	345	345

TABLE A-17. - Injury experience and worktime data by general work location at salt mines and mills in the United States, by State, 1970 - Continued

State	Active operations		Average men working daily							Average days active								
	Mines	Mills	Underground mines				Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	
			Underground		Surface													Total
			Underground	Surface														
Alabama-----	1	1	-	-	-	-	4	4	125	129	-	-	-	365	365	365	365	
California-----	15	9	-	-	-	21	51	72	415	487	-	-	228	238	235	269	269	
Colorado-----	1	-	-	-	-	-	1	1	-	1	-	-	-	365	365	-	-	
Hawaii-----	1	-	-	-	-	-	1	1	-	1	-	-	-	120	120	-	-	
Kansas-----	9	7	51	12	63	-	19	82	350	432	264	-	-	353	285	294	294	
Louisiana-----	18	5	283	122	405	-	40	445	381	826	286	-	-	348	292	284	284	
Michigan-----	9	7	103	54	157	-	14	171	656	827	253	-	-	340	260	302	302	
Nevada-----	1	-	-	-	-	-	2	2	-	2	-	-	-	55	55	-	-	
New Mexico-----	1	2	-	-	-	-	2	2	46	48	-	-	-	91	91	305	305	
New York-----	6	5	275	150	425	-	18	443	594	1,037	279	-	-	299	280	260	260	
North Dakota-----	1	1	-	-	-	-	3	3	26	29	-	-	-	365	365	260	260	
Ohio-----	7	5	322	67	389	-	13	402	482	884	277	-	-	289	277	296	296	
Oklahoma-----	3	1	-	-	-	-	4	4	5	9	-	-	-	208	208	180	180	
Texas-----	12	3	30	14	44	-	75	119	237	356	257	-	-	294	280	267	267	
Utah-----	7	7	3	-	3	5	18	26	126	152	35	-	250	232	213	279	279	
Virginia-----	1	1	-	-	-	-	11	11	8	11	-	-	-	365	365	300	300	
West Virginia-----	3	-	-	-	-	-	-	-	-	11	-	-	-	332	332	-	-	
Total or average-----	96	54	1,067	419	1,486	26	279	1,791	3,451	5,242	276	233	293	278	278	286	286	
Man-days worked																		
Man-hours worked																		
State	Underground mines		Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines		Total	Open pit mines	Other surface mining	Total mining activities	Mills	Grand total			
	Underground	Surface						Underground	Surface									
Alabama-----	-	-	4,797	1,460	1,460	45,638	47,098	-	-	-	-	11,680	11,680	365,106	376,786			
California-----	-	-	-	12,127	16,924	111,841	128,765	-	-	-	40,102	98,824	138,926	897,269	1,036,195			
Colorado-----	-	-	-	365	365	-	365	-	-	-	-	2,600	2,600	-	2,600			
Hawaii-----	-	-	-	120	120	-	120	-	-	-	-	360	360	-	-			
Kansas-----	13,459	3,162	-	6,716	23,337	102,810	126,147	107,675	25,296	132,971	-	53,728	186,699	822,485	1,009,184			
Louisiana-----	80,345	35,476	-	13,926	129,747	108,086	237,833	640,910	281,410	922,320	-	112,126	1,034,446	873,351	1,907,797			
Michigan-----	26,269	13,465	-	4,762	44,496	198,042	242,538	218,022	121,184	339,206	-	38,096	377,302	1,648,610	2,025,912			
Nevada-----	-	-	-	110	110	-	110	-	-	-	-	880	880	-	-			
New Mexico-----	-	-	-	182	182	14,016	14,198	-	-	-	-	1,456	1,456	112,128	113,584			
New York-----	76,849	41,850	-	5,374	124,073	154,598	278,671	618,312	339,551	957,863	-	43,032	1,000,895	1,237,119	2,238,014			
North Dakota-----	-	-	-	1,095	1,095	6,760	7,855	-	-	-	-	8,760	8,760	54,080	62,840			
Ohio-----	88,554	19,180	-	3,757	111,491	142,639	254,130	708,432	153,439	861,871	-	30,056	891,927	1,123,173	2,015,100			
Oklahoma-----	-	-	-	830	830	900	1,730	-	-	-	-	6,640	6,640	7,200	13,840			
Texas-----	7,616	3,696	-	22,041	33,353	63,246	96,599	60,928	29,568	90,496	-	178,170	268,666	505,968	774,634			
Utah-----	105	-	1,250	4,182	5,537	35,111	40,648	840	-	840	-	33,233	44,973	273,796	317,869			
Virginia-----	-	-	-	1,095	1,095	2,400	3,495	-	-	-	-	8,760	8,760	19,200	27,960			
West Virginia-----	-	-	-	3,650	3,650	-	3,650	-	-	-	-	29,200	29,200	-	29,200			
Total-----	293,197	116,829	410,026	81,792	497,865	986,087	1,483,952	2,355,119	950,448	3,305,567	50,102	657,601	4,013,270	7,939,485	11,952,755			

TABLE A-18. - Injury experience and worktime data by general work location at sulfur mines and mills in the United States, by State, 1970

State	Fatal						Nonfatal									
	Underground mines			Open pit mines	Other surface mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining activities	Total mining activities	Mills	Grand total	
	Underground	Surface	Total					Underground	Surface	Total						
Injuries																
Frequency rates per million man-hours																
Louisiana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	39
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	18	-	18
Total-----	-	-	-	-	-	-	-	-	-	-	-	-	-	57	-	57
Severity rates per million man-hours																
Louisiana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	21.08	-	21.08
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	7.25	-	7.25
Combined rate-----	-	-	-	-	-	-	-	-	-	-	-	-	-	13.16	-	13.16
Average men working daily																
Louisiana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	442	-	442
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	213	-	213
Combined rate-----	-	-	-	-	-	-	-	-	-	-	-	-	-	311	-	311
Average days active																
Active operations																
Mines	Underground mines			Open pit mines	Other surface mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining activities	Total mining activities					
		Underground	Surface									Total				
8	-	-	-	-	798	-	798	-	-	290	-	-				
11	-	-	-	-	928	-	928	-	-	334	-	-				
19	-	-	-	-	1,726	-	1,726	-	-	314	-	-				
Man-days worked																
Man-hours worked																
Underground mines			Open pit mines	Other surface mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining activities	Total mining activities	Mills	Grand total		
Underground	Surface	Total					Underground	Surface	Total							
-	-	-	-	231,276	231,276	-	231,276	-	-	1,850,208	-	-	-	1,850,208		
-	-	-	-	310,217	310,217	-	310,217	-	-	2,481,742	-	-	-	2,481,742		
-	-	-	-	541,493	541,493	-	541,493	-	-	4,331,950	-	-	-	4,331,950		

TABLE A-19. - Injury experience and worktime data by general work location at miscellaneous nonmetal mines and mills in the United States, by State, 1970

State	Fatal				Nonfatal				
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	
	Underground	Surface							Total
		Underground	Surface						
Injuries									
Alabama-----	-	-	-	-	-	-	-	2	2
Alaska-----	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	1	1	1	2	-	2
Arkansas-----	-	-	-	14	3	17	18	8	26
California-----	1	-	1	8	2	45	152	15	197
Colorado-----	-	1	1	20	3	23	30	45	5
Connecticut-----	-	-	-	-	-	-	2	3	5
Delaware-----	-	-	-	-	-	-	-	-	-
Florida-----	-	-	-	3	-	3	6	8	8
Georgia-----	-	-	-	1	3	-	-	15	21
Hawaii-----	-	-	-	-	-	-	-	2	5
Idaho-----	-	-	-	-	-	-	1	3	4
Illinois-----	-	-	-	33	2	35	35	9	44
Indiana-----	-	-	-	-	-	-	-	-	-
Iowa-----	-	-	-	-	-	-	2	-	2
Kansas-----	-	-	-	-	-	-	5	-	5
Kentucky-----	-	-	-	4	-	4	-	13	13
Louisiana-----	-	-	-	-	-	-	-	-	-
Maine-----	-	-	-	-	-	-	-	-	-
Maryland-----	-	-	-	-	-	-	-	2	2
Massachusetts-----	-	-	-	-	-	-	-	-	-
Michigan-----	-	-	-	-	-	-	-	10	10
Minnesota-----	-	-	-	-	-	-	24	29	53
Mississippi-----	-	-	-	-	-	-	5	12	17
Missouri-----	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-
Nebraska-----	-	-	-	-	-	-	8	43	51
Nevada-----	-	-	-	-	-	-	-	-	-
New Hampshire-----	-	-	-	-	-	-	-	9	9
New Jersey-----	-	-	-	-	-	-	-	4	4
New Mexico-----	-	-	-	-	-	-	-	-	-
New York-----	1	-	1	4	-	4	4	13	17
North Carolina-----	-	-	1	1	4	1	5	12	17
North Dakota-----	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	-	-	-	-	-	-	-
Oklahoma-----	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	3	-	3	-	3
Pennsylvania-----	-	-	-	-	-	-	-	-	-
South Carolina-----	-	-	-	-	1	1	1	5	6
South Dakota-----	-	-	-	-	4	4	4	2	6
Tennessee-----	-	-	-	-	-	-	-	-	-
Texas-----	-	-	1	-	-	-	6	31	37
Utah-----	-	-	-	15	4	19	21	3	24
Vermont-----	-	-	-	8	-	8	10	12	22
Virginia-----	-	-	-	-	-	-	1	9	10
Washington-----	-	-	-	-	-	-	-	-	-
Wyoming-----	-	-	-	5	-	5	6	6	12
Total-----	2	1	3	116	14	130	267	432	679

TABLE A-19. - Injury experience and worktime data by general work location at miscellaneous nonmetal mines and mills in the United States, by State, 1970 - Continued

State	Fatal					Nonfatal						
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			
	Underground	Surface	Total						Underground	Surface	Total	
Frequency rates per million man-hours												
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	14.07
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	8.33
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	40.20
California-----	7.65	-	5.83	-	-	0.96	-	-	-	-	-	26.53
Colorado-----	-	32.84	4.43	-	-	3.58	-	-	-	-	-	96.35
Connecticut-----	-	-	-	-	-	-	-	-	-	-	-	47.34
Florida-----	-	-	-	-	-	-	-	-	-	-	-	31.92
Georgia-----	-	-	-	-	-	-	-	-	-	-	-	31.92
Hawaii-----	-	-	-	-	-	-	-	-	-	-	-	86.77
Idaho-----	-	-	-	-	-	-	-	-	-	-	-	55.15
Illinois-----	-	-	-	-	-	-	-	-	-	-	-	74.93
Indiana-----	-	-	-	-	-	-	-	-	-	-	-	27.69
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	45.80
Kentucky-----	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana-----	-	-	-	-	-	-	-	-	-	-	-	-
Maine-----	-	-	-	-	-	-	-	-	-	-	-	-
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	1.84
Michigan-----	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota-----	-	-	-	-	-	-	-	-	-	-	-	23.62
Mississippi-----	-	-	-	-	-	-	-	-	-	-	-	61.38
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	30.18
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska-----	-	-	-	-	-	-	-	-	-	-	-	-
Nevada-----	-	-	-	-	-	-	-	-	-	-	-	45.86
New Hampshire-----	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey-----	-	-	-	-	-	-	-	-	-	-	-	32.51
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	30.00
New York-----	-	-	-	-	-	-	-	-	-	-	-	22.39
North Carolina-----	8.00	-	6.45	-	-	4.78	-	-	-	-	-	11.59
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	37.59
Pennsylvania-----	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina-----	-	-	-	-	-	-	-	-	-	-	-	20.61
South Dakota-----	-	-	-	-	-	-	-	-	-	-	-	62.21
Tennessee-----	-	-	-	-	-	-	-	-	-	-	-	-
Texas-----	-	-	-	-	-	-	-	-	-	-	-	53.17
Utah-----	-	-	-	-	-	-	-	-	-	-	-	32.83
Vermont-----	-	-	-	-	-	-	-	-	-	-	-	29.71
Virginia-----	-	-	-	-	-	-	-	-	-	-	-	23.45
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	5.66
Combined rate-----	.85	1.94	1.05	-	-	.46	.25	.31	49.28	27.16	45.31	26.56
												29.89

TABLE A-19. - Injury experience and worktime data by general work location at miscellaneous nonmetal mines and mills in the United States, by State, 1970 - Continued

State	Fatal					Nonfatal											
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	
	Underground	Surface							Underground	Surface							Total
Severity rates per million man-hours																	
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	357	-	274
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	401	-	-	321	156	-	-	195	-
Arkansas-----	-	-	-	-	-	-	-	-	3,347	4,104	-	3,507	3,116	-	-	2,595	117
California-----	45,906	-	34,996	-	-	533	-	886	1,278	565	-	1,108	443	-	485	1,069	1,337
Colorado-----	-	197,038	26,602	-	-	21,498	-	12,847	4,085	37,569	-	8,606	13,278	-	1,069	986	-
Connecticut-----	-	-	-	-	-	-	70,475	57,052	-	-	-	-	23,712	-	1,724	5,106	5,106
Florida-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	478	472	-
Georgia-----	-	-	-	-	-	-	12,534	9,628	168	-	-	134	713	-	533	301	355
Hawaii-----	-	-	-	-	-	-	-	-	-	-	-	-	1,505	-	1,126	1,381	-
Idaho-----	-	-	-	-	-	-	-	-	-	-	-	-	1,974	-	1,066	1,571	-
Illinois-----	-	-	-	-	-	-	-	-	20,484	1,208	-	18,339	1,217	-	18,539	679	9,078
Indiana-----	-	-	-	-	-	-	-	-	-	-	-	-	235	-	-	-	75
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	9,319	-	448	356	-
Kansas-----	-	-	-	-	-	-	-	-	346	-	-	271	-	-	377	-	377
Kentucky-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maine-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Michigan-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Minnesota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nevada-----	-	-	-	-	-	-	-	-	-	-	-	-	7,888	-	1,970	3,144	-
New Hampshire-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	470	468	-
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,333	1,575	-
New York-----	48,024	-	38,699	-	-	28,682	-	7,903	1,585	-	-	1,277	-	-	947	1,411	-
North Carolina-----	-	-	-	-	-	-	5,925	4,089	478	-	-	448	24	-	1,587	6,099	4,229
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	572	-	-	-	451
Pennsylvania-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina-----	-	-	-	-	-	-	-	-	-	-	-	-	177	-	310	271	-
South Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	734	-	1,004	798	-
Tennessee-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas-----	-	-	-	-	-	-	10,889	8,623	-	-	-	-	156	-	214	6,366	5,086
Utah-----	-	-	-	-	-	-	-	-	1,477	3,526	-	1,913	1,779	-	1,888	2,492	-
Vermont-----	-	-	-	-	-	-	-	-	4,918	-	-	3,955	323	-	2,083	2,492	-
Virginia-----	-	-	-	-	-	-	-	-	-	-	-	-	685	-	7,469	5,999	-
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming-----	-	-	-	-	-	-	-	-	304	-	-	251	834	-	531	428	-
Combined rate-----	5,098	11,638	6,273	-	-	2,790	1,475	1,849	4,170	3,393	4,030	2,515	1,383	54	2,117	2,230	-

TABLE A-19. - Injury experience and worktime data by general work location at miscellaneous nonmetal mines and mills in the United States, by State, 1970 - Continued

State	Active operations		Average men working daily							Average days active					
	Mines	Mills	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills
			Underground	Surface	Total										
Alabama-----	2	2	-	-	-	14	-	14	48	62	-	267	-	267	284
Alaska-----	1	1	-	-	-	10	-	10	3	13	-	252	-	252	252
Arizona-----	34	10	12	3	15	81	-	96	51	167	286	184	-	184	225
Arkansas-----	36	8	63	18	81	31	22	134	199	333	251	138	362	243	241
California-----	94	38	66	22	88	399	21	508	2,275	2,783	244	258	277	257	315
Colorado-----	22	5	83	14	97	37	-	134	76	210	291	181	-	260	309
Connecticut-----	2	1	-	-	-	8	-	8	34	42	-	313	-	313	313
Florida-----	1	1	-	-	-	-	1	1	74	75	-	-	286	286	286
Georgia-----	12	6	17	4	21	49	-	70	198	268	214	254	-	242	285
Hawaii-----	20	4	-	-	-	51	-	51	22	73	-	126	-	126	141
Idaho-----	9	5	4	-	4	23	-	27	22	49	80	98	-	96	147
Illinois-----	13	5	146	18	164	-	-	164	159	323	289	-	-	289	329
Indiana-----	-	1	-	-	-	-	-	-	1	1	-	-	-	-	206
Kansas-----	4	3	-	-	-	18	-	18	25	43	-	54	-	54	81
Kentucky-----	7	1	66	18	84	7	-	91	18	109	209	50	-	196	232
Louisiana-----	-	5	-	-	-	-	-	-	118	118	-	-	-	-	290
Maine-----	4	-	2	-	2	-	-	6	3	6	110	136	-	127	-
Maryland-----	2	2	-	-	-	3	17	17	357	374	-	146	290	146	219
Michigan-----	20	3	-	-	-	3	-	3	3	6	-	60	-	60	330
Minnesota-----	1	1	-	-	-	-	2	2	208	210	-	-	252	252	252
Mississippi-----	1	1	-	-	-	192	-	192	212	404	-	258	-	258	262
Missouri-----	18	19	-	-	-	82	-	82	145	227	-	293	-	293	318
Montana-----	7	5	-	-	-	1	-	1	2	3	-	14	-	14	225
Nebraska-----	1	1	-	-	-	140	11	165	374	539	266	209	377	225	270
Nevada-----	36	15	11	3	14	2	-	2	-	2	-	10	-	10	-
New Hampshire-----	2	-	-	-	-	-	-	-	-	-	-	-	150	150	360
New Jersey-----	1	2	-	-	-	-	1	1	96	97	-	184	-	186	269
New Mexico-----	20	12	3	1	4	40	-	44	61	105	200	260	-	254	253
New York-----	6	10	64	13	77	26	-	103	272	375	252	267	-	268	298
North Carolina-----	32	18	17	1	18	188	-	206	421	627	279	-	-	-	-
North Dakota-----	1	-	-	-	-	1	-	1	-	1	-	41	-	41	-
Ohio-----	1	-	-	-	-	1	-	1	-	-	-	10	-	10	-
Oklahoma-----	2	1	-	-	-	6	-	6	3	9	-	253	-	253	97
Oregon-----	20	2	-	-	-	32	-	32	7	39	-	246	-	246	301
Pennsylvania-----	4	2	-	-	-	6	-	6	4	10	-	109	-	109	188
South Carolina-----	13	5	-	-	-	43	-	43	85	128	-	226	-	226	303
South Dakota-----	53	1	-	-	-	74	-	74	10	84	-	124	-	124	286
Tennessee-----	2	2	-	-	-	23	-	23	7	30	-	254	-	254	305
Texas-----	18	14	-	-	-	64	9	73	228	301	-	236	322	246	297
Utah-----	37	6	191	51	242	18	4	264	96	360	269	117	230	258	243
Vermont-----	4	5	38	9	47	59	-	106	224	330	281	249	-	263	286
Virginia-----	8	7	-	-	-	47	-	47	152	199	-	245	-	245	270
Washington-----	7	2	-	-	-	7	-	7	21	28	-	220	-	220	261
Wyoming-----	11	4	286	59	345	26	-	371	455	826	307	258	-	304	332
Total or average-----	591	236	1,069	234	1,303	1,816	88	3,207	6,769	9,976	274	228	314	249	299

[illegible]

TABLE A-20. - Injury experience and worktime data by general work location at nonmetal mines and mills in the United States, by State, 1970 - Continued

State	Fatal					Nonfatal											
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	
	Underground	Surface	Total						Underground	Surface	Total						
Frequency rates per million man-hours																	
Alabama-----	-	-	-	3.93	-	3.75	-	0.61	-	-	-	3.93	-	-	3.75	12.31	10.93
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	36.47	-	-	5.61	-	-	9.41	12.12	10.87
Arkansas-----	-	-	-	-	-	-	-	-	108.99	87.32	-	9.95	-	-	44.41	29.51	29.51
California-----	7.40	-	5.55	-	-	.67	-	.11	59.17	44.49	55.51	39.75	-	-	37.75	28.71	30.21
Colorado-----	-	30.76	3.95	-	-	2.33	-	2.37	99.72	92.28	98.76	46.30	-	-	77.01	45.78	61.64
Connecticut-----	-	-	-	-	-	9.59	-	6.90	-	-	-	73.76	-	-	28.77	28.77	41.39
Delaware-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida-----	-	-	-	-	-	.19	-	.11	-	-	-	3.54	-	-	3.54	5.82	4.93
Georgia-----	-	-	-	.65	-	.14	-	.23	84.03	-	-	31.16	-	-	32.17	24.94	26.26
Hawaii-----	-	-	-	-	-	.14	-	-	-	-	-	57.49	-	-	57.49	60.28	58.32
Idaho-----	-	-	-	1.57	-	1.56	-	1.35	6.28	-	-	6.28	-	-	6.28	79.83	16.23
Illinois-----	-	-	-	-	-	-	-	-	97.85	47.38	92.24	7.06	-	-	69.08	28.79	38.39
Indiana-----	-	-	-	-	-	-	-	-	-	-	-	10.17	-	-	5.21	9.89	9.20
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	18.50	-	-	16.82	52.11	40.31
Kansas-----	-	-	-	-	-	-	-	-	21.12	-	16.38	28.64	-	-	16.30	38.43	34.52
Kentucky-----	-	-	-	-	-	-	-	-	36.45	-	28.53	22.81	-	-	25.35	36.76	30.01
Louisiana-----	7.80	-	5.42	-	-	.63	-	1.29	23.40	3.55	17.35	-	-	-	17.93	26.43	20.83
Maine-----	-	-	-	-	-	-	-	-	-	-	-	23.32	-	-	22.40	53.62	36.61
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	18.01	-	-	56.56	49.89	49.89
Massachusetts-----	-	-	-	-	-	-	-	-	28.31	53.79	36.43	-	-	-	57.41	47.56	47.56
Michigan-----	6.29	-	4.29	-	-	2.76	-	.48	-	-	-	11.13	-	-	26.25	19.86	20.98
Minnesota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39.99	37.50	37.50
Mississippi-----	-	-	-	-	-	-	-	-	-	-	-	22.42	-	-	22.02	23.18	22.99
Missouri-----	-	-	-	-	-	-	-	-	43.93	-	-	43.93	-	-	43.93	47.21	45.46
Montana-----	-	-	-	-	-	-	-	-	27.79	-	24.86	23.66	-	-	24.12	37.69	31.38
Nebraska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nevada-----	-	-	-	-	-	-	-	-	-	-	-	27.61	-	-	22.53	37.81	34.17
New Hampshire-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey-----	-	-	-	-	-	-	-	-	-	-	-	16.28	-	-	15.97	38.10	36.17
New Mexico-----	.81	-	.58	-	-	.56	-	.36	47.83	28.70	42.27	42.27	-	-	41.28	18.40	32.88
New York-----	1.09	-	.73	-	-	.63	-	.26	40.18	22.65	34.50	42.68	-	-	34.51	26.31	29.49
North Carolina-----	-	-	-	-	-	-	-	.28	26.57	-	24.91	11.51	-	-	12.10	33.67	28.19
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	-	-	-	-	-	-	40.16	22.57	37.24	15.19	-	-	33.99	21.68	26.02
Oklahoma-----	-	-	-	-	-	-	-	1.37	-	-	25.34	18.84	-	-	14.84	30.09	26.78
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	28.56	-	-	27.26	10.98	19.89
Pennsylvania-----	-	-	-	-	-	-	-	-	69.24	-	57.07	17.59	-	-	28.80	36.81	34.80
South Carolina-----	-	-	-	-	-	-	-	-	-	-	-	3.21	-	-	32.94	28.72	28.72
South Dakota-----	-	-	-	-	-	-	-	-	-	-	-	24.30	-	-	57.05	41.19	41.19
Tennessee-----	-	-	-	-	-	-	-	-	-	-	-	21.58	-	-	33.15	37.18	37.18
Texas-----	-	-	-	2.72	-	.57	-	.72	49.24	101.66	66.30	16.31	-	-	10.83	32.02	21.26
Utah-----	1.35	-	1.04	-	-	.80	-	.47	47.31	27.32	42.73	59.70	-	-	44.18	24.70	36.10
Vermont-----	-	-	-	-	-	-	-	-	92.79	-	74.62	16.87	-	-	44.30	23.28	29.68
Virginia-----	-	-	-	-	-	-	-	-	8.15	-	6.52	5.84	-	-	6.00	34.73	27.09
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia-----	-	-	-	-	-	-	-	-	29.88	-	23.90	40.94	-	-	21.85	19.91	20.70
Wisconsin-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60.72	58.43
Wyoming-----	-	-	-	-	-	-	-	-	7.15	-	5.90	14.64	-	-	8.75	9.94	9.52
Combined rate-----	1.40	.35	1.14	.32	-	.56	.16	.30	43.14	24.93	38.61	18.93	-	-	11.30	25.60	25.28

TABLE A-20. - Injury experience and worktime data by general work location at nonmetal mines and mills in the United States, by State, 1970 - Continued

State	Active operations			Average men working daily							Average days active					
	Under-ground mines	Surface mines	Mills	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills
				Underground	Surface	Total										
Alabama-----	-	43	27	-	-	-	149	4	153	617	770	-	206	365	211	279
Alaska-----	2	1	1	12	3	15	10	-	10	3	13	-	252	-	232	252
Arizona-----	2	46	15	3	3	15	124	-	124	-	257	286	179	-	191	240
Arkansas-----	2	63	17	63	18	81	138	22	241	722	963	251	179	362	220	254
California-----	12	164	73	69	25	94	621	72	787	3,081	3,868	240	233	249	203	300
Colorado-----	13	171	13	107	16	123	172	1	296	185	481	257	126	365	181	280
Connecticut-----	-	6	2	-	-	-	19	-	19	56	75	-	259	-	259	247
Delaware-----	-	1	1	-	-	-	-	-	-	1	1	-	313	-	313	313
Florida-----	5	40	35	-	-	-	1,445	1	1,446	2,077	3,523	-	293	286	293	321
Georgia-----	5	72	44	17	4	21	680	-	701	2,888	3,589	214	278	-	276	306
Hawaii-----	-	22	5	-	-	-	52	1	53	26	79	-	126	120	126	160
Idaho-----	1	21	8	4	-	4	348	-	352	65	417	80	224	-	222	193
Illinois-----	13	28	24	146	18	164	83	-	247	760	1,007	289	211	-	263	269
Indiana-----	3	28	14	35	9	44	65	-	109	471	580	262	198	-	224	299
Iowa-----	1	23	21	12	3	15	143	-	158	346	504	270	281	-	280	255
Kansas-----	5	29	18	68	20	88	81	19	188	650	838	260	109	353	205	278
Kentucky-----	4	132	49	66	18	84	132	-	216	89	305	209	163	-	181	300
Louisiana-----	5	35	18	283	122	405	74	838	1,317	693	2,010	286	308	293	291	277
Maine-----	1	9	1	2	-	2	35	-	37	19	56	110	154	-	151	245
Maryland-----	-	13	11	-	-	-	33	-	33	132	166	-	209	-	209	247
Massachusetts-----	-	3	1	-	-	-	15	-	15	46	61	-	204	-	204	331
Michigan-----	4	39	22	165	80	245	92	31	368	1,351	1,719	229	220	312	204	311
Minnesota-----	-	7	5	-	-	-	19	-	19	132	151	-	173	-	173	279
Mississippi-----	-	39	21	-	-	-	161	2	163	550	713	-	219	252	219	265
Missouri-----	-	107	24	-	-	-	408	-	408	294	702	-	237	-	232	302
Montana-----	2	18	10	76	9	85	134	-	219	197	416	237	229	-	232	302
Nebraska-----	-	5	4	-	-	-	8	-	8	6	14	-	188	-	188	233
Nevada-----	4	42	18	17	6	23	171	13	207	532	739	170	206	327	210	267
New Hampshire-----	-	5	2	-	-	-	8	-	8	26	34	-	73	-	73	268
New Jersey-----	-	11	9	-	-	-	38	1	39	281	320	-	201	150	199	292
New Mexico-----	11	30	25	887	360	1,247	60	2	1,309	853	2,162	349	174	91	340	302
New York-----	9	21	30	436	194	630	116	18	764	1,191	1,955	270	203	299	260	263
North Carolina-----	2	75	40	17	1	18	398	-	416	1,278	1,694	279	268	-	268	259
North Dakota-----	-	5	2	-	-	-	6	3	9	38	47	-	26	365	139	206
Ohio-----	8	115	42	416	78	494	274	13	781	1,300	2,081	272	189	289	243	273
Oklahoma-----	-	26	13	-	-	-	97	4	101	367	468	-	255	208	253	255
Oregon-----	1	34	9	4	2	6	62	-	68	47	115	104	211	-	202	242
Pennsylvania-----	9	66	30	60	17	77	230	-	307	778	1,085	241	210	-	218	266
South Carolina-----	-	58	27	-	-	-	165	-	165	857	1,022	-	224	-	224	274
South Dakota-----	-	58	4	-	-	-	114	-	114	304	194	-	180	-	180	274
Tennessee-----	-	62	25	-	-	-	357	-	357	304	661	-	239	-	239	280
Texas-----	2	132	61	30	14	44	374	-	1,430	1,524	2,954	257	239	331	305	276
Utah-----	33	38	21	349	105	454	151	26	631	411	1,042	264	194	247	247	272
Vermont-----	3	2	5	38	9	47	61	-	108	224	332	281	226	-	260	286
Virginia-----	1	30	20	55	14	69	92	3	164	399	563	278	226	365	251	289
Washington-----	-	21	2	-	-	-	36	-	36	21	57	-	102	-	102	261
West Virginia-----	2	9	6	30	7	37	15	11	63	121	184	283	212	332	274	208
Wisconsin-----	-	2	2	-	-	-	6	-	6	15	21	-	22	-	22	126
Wyoming-----	4	33	20	286	59	345	205	-	550	902	1,452	307	225	-	277	320
Total or average-----	162	1,857	859	3,750	1,211	4,961	8,278	2,097	15,336	27,125	42,461	287	233	311	261	286

TABLE A-21. - Injury experience and worktime data on offeworkers at nonmetal mines and mills in the United States, by mineral industry, 1970

Mineral industry	Injuries			Frequency rates per million man-hours			Severity rates per million man-hours			Average men working daily	Average days active	Man-days worked	Man-hours worked
	Fatal	Nonfatal	Total	Fatal	Nonfatal	Total	Fatal	Nonfatal	Total				
Clay-----	-	5	5	-	1.76	1.76	-	29	29	1,388	257	357,213	2,845,681
Gypsum-----	-	1	1	-	1.85	1.85	-	9	9	262	259	67,778	540,242
Phosphate rock-----	-	-	-	-	-	-	-	-	-	240	258	61,916	495,139
Potash-----	-	1	1	-	2.15	2.15	-	9	9	197	295	58,144	465,864
Salt-----	-	1	1	-	.71	.71	-	11	11	684	258	176,789	1,410,594
Sulfur-----	-	-	-	-	-	-	-	-	-	248	332	82,224	657,787
Miscellaneous nonmetals-----	-	4	4	-	1.83	1.83	-	19	19	1,058	258	273,041	2,181,281
Total or average-----	-	12	12	-	1.40	1.40	-	17	17	4,077	264	1,077,105	8,596,588

TABLE A-22. - Injury experience and worktime data on offeworkers at nonmetal mines and mills in the United States, by State, 1970

State	Injuries			Frequency rates per million man-hours			Severity rates per million man-hours			Average men working daily	Average days active	Man-days worked	Man-hours worked
	Fatal	Nonfatal	Total	Fatal	Nonfatal	Total	Fatal	Nonfatal	Total				
Alabama-----	-	-	-	-	-	-	-	-	-	58	262	15,197	120,356
Arizona-----	-	-	-	-	-	-	-	-	-	25	218	5,451	43,547
Arkansas-----	-	1	1	-	5.87	5.87	-	82	82	77	277	21,304	170,432
California-----	-	-	-	-	-	-	-	-	-	475	252	119,564	956,125
Colorado-----	-	-	-	-	-	-	-	-	-	24	246	5,904	45,128
Connecticut-----	-	-	-	-	-	-	-	-	-	4	277	1,108	8,860
Florida-----	-	-	-	-	-	-	-	-	-	259	262	67,802	542,432
Georgia-----	-	3	3	-	3.31	3.31	-	79	79	439	259	113,773	905,778
Hawaii-----	-	-	-	-	-	-	-	-	-	4	279	1,117	8,938
Idaho-----	-	-	-	-	-	-	-	-	-	25	222	5,555	45,279
Illinois-----	-	-	-	-	-	-	-	-	-	63	274	17,292	138,341
Indiana-----	-	-	-	-	-	-	-	-	-	51	264	13,451	106,252
Iowa-----	-	-	-	-	-	-	-	-	-	48	268	12,859	103,440
Kansas-----	-	-	-	-	-	-	-	-	-	90	262	23,566	184,563
Kentucky-----	-	-	-	-	-	-	-	-	-	21	257	5,393	43,144
Louisiana-----	-	-	-	-	-	-	-	-	-	131	272	35,574	285,222
Maine-----	-	-	-	-	-	-	-	-	-	1	235	235	1,880
Maryland-----	-	1	1	-	41.14	41.14	-	41	41	13	234	3,038	24,305
Massachusetts-----	-	-	-	-	-	-	-	-	-	5	298	1,490	11,920
Michigan-----	-	-	-	-	-	-	-	-	-	248	260	64,382	513,729
Minnesota-----	-	-	-	-	-	-	-	-	-	10	265	2,652	21,212
Mississippi-----	-	-	-	-	-	-	-	-	-	60	263	15,798	127,242
Missouri-----	-	1	1	-	12.46	12.46	-	62	62	43	234	10,047	80,227
Montana-----	-	-	-	-	-	-	-	-	-	46	262	12,048	96,498
Nebraska-----	-	-	-	-	-	-	-	-	-	4	294	1,178	9,149
Nevada-----	-	-	-	-	-	-	-	-	-	97	250	24,210	193,812
New Hampshire-----	-	-	-	-	-	-	-	-	-	1	269	269	2,152
New Jersey-----	-	-	-	-	-	-	-	-	-	35	237	8,300	64,944
New Mexico-----	-	1	1	-	2.30	2.30	-	9	9	192	283	54,413	435,372
New York-----	-	3	3	-	5.74	5.74	-	78	78	247	264	65,242	522,419
North Carolina-----	-	-	-	-	-	-	-	-	-	88	244	21,512	173,488
North Dakota-----	-	-	-	-	-	-	-	-	-	4	220	880	7,040
Ohio-----	-	-	-	-	-	-	-	-	-	253	264	66,672	525,499
Oklahoma-----	-	1	1	-	11.60	11.60	-	58	58	44	252	11,086	86,208
Oregon-----	-	-	-	-	-	-	-	-	-	4	218	874	6,882
Pennsylvania-----	-	-	-	-	-	-	-	-	-	65	259	16,859	132,394
South Carolina-----	-	-	-	-	-	-	-	-	-	56	256	14,360	116,482
South Dakota-----	-	-	-	-	-	-	-	-	-	7	236	1,652	13,223
Tennessee-----	-	-	-	-	-	-	-	-	-	47	257	12,056	98,395
Texas-----	-	1	1	-	.99	.99	-	8	8	419	302	126,702	1,013,638
Utah-----	-	-	-	-	-	-	-	-	-	85	262	22,293	178,430
Vermont-----	-	-	-	-	-	-	-	-	-	19	262	4,975	39,813
Virginia-----	-	-	-	-	-	-	-	-	-	53	268	14,186	112,644
Washington-----	-	-	-	-	-	-	-	-	-	1	117	117	936
West Virginia-----	-	-	-	-	-	-	-	-	-	9	213	1,921	15,368
Wisconsin-----	-	-	-	-	-	-	-	-	-	2	255	510	4,530
Wyoming-----	-	-	-	-	-	-	-	-	-	125	258	32,238	258,920
Total or average-----	-	12	12	-	1.40	1.40	-	17	17	4,077	264	1,077,105	8,596,588

APPENDIX B.-- 1971 DATA

TABLE B-1. - Injury experience by degree and worktime data on nonmetal mines and mills in the United States, by general work location, 1971

General work location	Injuries						Frequency rates per million man-hours			Severity rates per million man-hours			Average men working daily	Average days active	Man-days worked	Man-hours worked	
	Fatal	Nonfatal			All injuries	Fatal	Non-fatal	All injuries	Fatal	Non-fatal	All injuries						
		Permanent	Total non-fatal	Tempo-rary total													
												Partial					
																	Total
Underground mines: Underground----- Surface-----	12 -	1 -	8 3	372 60	381 63	393 63	1.39 -	44.15 23.51	45.54 23.51	8,343 -	2,501 761	10,844 761	163 -	3,698 1,120	291 298	1,075,465 333,885	8,630,222 2,679,184
Total or average--- Open pit mines----- Other surface mining----	12 3 -	1 1 -	11 9 -	432 286 1	444 296 1	456 299 1	1.06 .18 -	39.26 17.33 5.95	40.32 17.51 5.95	6,366 1,054 -	2,089 1,075 -	8,455 2,129 6	163 1,819 18	4,818 9,179 72	293 228 292	1,409,350 2,095,997 21,014	11,309,406 17,077,422 168,106
Total or average, mining----- Mills-----	15 9	2 2	20 45	719 1,520	741 1,567	756 1,576	.53 .16	25.95 28.12	26.48 28.28	3,152 969	1,470 1,184	4,622 2,153	2,000 912	14,069 24,320	251 285	3,526,361 6,926,372	28,554,934 55,723,029
Grand total or average-----	24	4	65	2,239	2,308	2,332	.28	27.39	27.67	1,709	1,281	2,989	2,912	38,389	272	10,452,733	84,277,963

TABLE B-2. - Number and average severity of injuries by degree at nonmetal mines and mills in the United States, by general work location and detailed cause, 1971

General work location and detailed cause by injury	Injuries						Average severity			
	Fatal	Nonfatal				All injuries	Permanent partial	Temporary total	All injuries	
		Permanent		Temporary total	Total nonfatal					
		Total	Partial							
UNDERGROUND MINES										
Underground (including shaft and alope):										
Falls of roof or back:										
While mining-----	2	-	1	26	27	29	50	36	448	
While loading-----	1	1	-	1	2	3	-	11	4,004	
While testing or barring down back-----	-	-	-	3	3	3	-	19	19	
While preparing or installing rock bolt-----	-	-	-	1	1	1	-	73	73	
All other-----	-	-	-	1	1	1	-	1	1	
Falls of face or side:										
While mining-----	-	-	-	3	3	3	-	6	6	
While loading-----	-	-	-	2	2	2	-	40	40	
Sliding or falling material or objects:										
Timber or other support-----	-	-	-	2	2	2	-	11	11	
Dropped or thrown by coworker-----	-	-	-	2	2	2	-	10	10	
From car, bin, platform, or chute-----	-	-	-	7	7	7	-	13	13	
Falling cage-----	-	-	-	2	2	2	-	3	3	
Falling equipment or machinery under repair-----	-	-	-	1	1	1	-	41	41	
From stockpile, dump, or gob-----	-	-	-	2	2	2	-	8	8	
All other-----	-	-	-	1	1	1	-	57	57	
Slips or falls of persons:										
On same level:										
While handling material-----	-	-	-	14	14	14	-	24	24	
Caused by handtool slipping or breaking-----	-	-	-	3	3	3	-	10	10	
Caused by electric current-----	-	-	-	1	1	1	-	7	7	
While operating or moving machinery-----	-	-	-	1	1	1	-	18	18	
All other-----	-	-	-	14	14	14	-	28	28	
From an elevation:										
While handling material-----	-	-	-	1	1	1	-	3	3	
Caused by failure of scaffold, ladder, or other support-----	-	-	-	8	8	8	-	25	25	
All other-----	-	-	-	9	9	9	-	26	26	
Handling material:										
Prop, stull, or timber-----	-	-	-	7	7	7	-	43	43	
Ore, valuable mineral-----	-	-	-	16	16	16	-	21	21	
Rock or waste-----	-	-	-	4	4	4	-	22	22	
Rail-----	-	-	-	3	3	3	-	105	105	
Flying particle while handling material-----	-	-	-	4	4	4	-	48	48	
All other-----	-	-	2	85	87	87	110	20	22	
Handtools:										
Axe, hatchet, or adz-----	-	-	-	2	2	2	-	8	8	
Hammer or sledge-----	-	-	-	8	8	8	-	15	15	
Crowbar or bar-----	-	-	-	5	5	5	-	7	7	
Saw-----	-	-	-	1	1	1	-	18	18	
Handtools used to install rock bolt-----	-	-	-	1	1	1	-	22	22	
In hand of fellow worker-----	-	-	-	1	1	1	-	2	2	
All other-----	-	-	-	4	4	4	-	22	22	
Stepping or kneeling on sharp or loose objects:										
Stepping on sharp object-----	-	-	-	2	2	2	-	3	3	
Stepping on loose object-----	-	-	-	7	7	7	-	28	28	
Striking or bumping against objects-----	-	-	-	4	4	4	-	6	6	
Haulage:										
Cages, cars, or motors:										
Struck, run over, or squeezed between:										
Coupling or uncoupling-----	-	-	-	2	2	2	-	24	24	
Pulling, pushing, or dropping-----	-	-	1	-	1	1	1,500	-	1,500	
Operating or riding-----	-	-	-	1	1	1	-	25	25	
All other-----	-	-	-	1	1	1	-	67	67	
Squeezed between cage, car, or motor, and other object:										
Coupling or uncoupling-----	-	-	-	1	1	1	-	37	37	
Operating or riding-----	-	-	-	3	3	3	-	13	13	
All other-----	-	-	1	2	3	3	60	43	34	
Falling, slipping, or jumping into or from-----	-	-	-	1	1	1	-	39	39	
Shuttle cars, transloaders, and small mobile trucks:										
Struck or run over-----	-	-	-	2	2	2	-	6	6	
Squeezed between shuttle car, transloader, or small mobile truck, and other object-----	-	-	-	3	3	3	-	30	30	
All other-----	-	-	1	9	10	10	50	12	16	
Railroad cars and locomotives-----	-	-	-	2	2	2	-	20	20	
Automobiles, gasoline or diesel trucks:										
While operating-----	-	-	-	8	8	8	-	45	45	
Slip or fall on or from-----	-	-	-	8	8	8	-	26	26	
Miscellaneous haulage:										
Rope or cable on haulage-----	-	-	-	6	6	6	-	7	7	
Slip or strain from moving car by hand-----	-	-	-	5	5	5	-	40	40	
Flying particle-----	-	-	-	3	3	3	-	41	41	
All other-----	-	-	-	4	4	4	-	8	8	
Explosions of gas or dust: Caused by all high explosives-----	1	-	-	1	1	1	-	128	128	
Explosives: Flying fragments-----	1	-	-	1	1	2	-	8	3,004	
Electricity:										
Mining or loading machine-----	-	-	1	-	1	1	4,500	-	4,500	
Cutout switch or junction box-----	-	-	-	2	2	2	-	12	12	
Cable, cable arc, or blowup-----	-	-	-	3	3	3	-	27	27	
Machinery:										
Belt conveyor-----	-	-	-	2	2	2	-	6	6	
Chain, bucket, shaker, or screw conveyor-----	-	-	-	1	1	1	-	3	3	
Mucking machine, mechanical loader-----	-	-	-	1	1	1	-	19	19	
Power drill, rotary or percussive (except rock bolting)-----	-	-	-	14	14	14	-	29	29	
Power drill for rock bolting-----	-	-	-	1	1	1	-	10	10	
Power equipment (except drill) for rock bolting-----	-	-	-	1	1	1	-	24	24	
Power shovel, dragline, bulldozer, etc-----	-	-	1	3	4	4	540	1	136	
Stationary machinery-----	1	-	-	3	3	4	-	17	1,513	
Particle set in motion by machinery (except rock bolting)-----	-	-	-	1	1	1	-	4	4	
Continuous mining machine-----	-	-	-	1	1	1	-	3	3	
All other-----	-	-	-	3	3	3	-	18	18	

TABLE B-2. - Number and average severity of injuries by degree at nonmetal mines and mills in the United States, by general work location and detailed cause, 1971 - Continued

General work location and detailed cause by injury	Injuries					Average severity			
	Pstal	Nonfatal				All injuries	Permanent partial	Temporary total	All injuries
		Permanent		Temporary total	Total nonfatal				
		Total	Partial						
UNDERGROUND MINES - Continued									
Underground (including shaft and slope) - Continued									
Suffocation (no flame or smoldering):									
Natural mine gas or oxygen deficient-----	7	-	-	1	1	8	-	1	5,250
Foreign gas-----	-	-	-	1	1	1	-	2	2
Miscellaneous causes:									
Acetylene or electric welding or cutting-----	-	-	-	1	1	1	-	6	6
Irritation or burn from caustic or acid-----	-	-	-	2	2	2	-	3	3
Burn from controlled fire-----	-	-	-	2	2	2	-	9	9
All other-----	-	-	-	6	6	6	-	16	16
Pneumoconiosis-----	-	-	-	1	1	1	-	66	66
Total or average, underground-----	12	1	8	372	381	393	865	23	238
Surface at underground:									
Slips or falls of persons:									
On same level:									
While handling material-----	-	-	-	2	2	2	-	12	12
All other-----	-	-	-	4	4	4	-	11	11
From an elevation:									
Caused by failure of scaffold, ladder, or other support-----	-	-	-	1	1	1	-	5	5
All other-----	-	-	-	4	4	4	-	4	4
Handling material:									
Prop, stull, or timber-----	-	-	-	2	2	2	-	7	7
Ore, valuable mineral-----	-	-	-	1	1	1	-	2	2
Rail-----	-	-	-	1	1	1	-	6	6
All other-----	-	-	2	19	21	21	345	8	40
Handtools:									
Crowbar or bar-----	-	-	-	1	1	1	-	3	3
All other-----	-	-	-	2	2	2	-	2	2
Stepping or kneeling on sharp or loose objects: Stepping on loose object-----	-	-	-	4	4	4	-	4	4
Striking or bumping against objects-----	-	-	-	1	1	1	-	1	1
Haulage:									
Cages, cars, or motors: Squeezed between cage, car, or motor, and other object-----	-	-	1	-	1	1	900	-	900
Railroad cars and locomotives-----	-	-	-	3	3	3	-	20	20
Automobiles, gasoline or diesel trucks:									
While operating-----	-	-	-	1	1	1	-	9	9
Slip or fall on or from-----	-	-	-	1	1	1	-	4	4
Electricity: Power or lighting circuit-----	-	-	-	1	1	1	-	3	3
Machinery:									
Belt conveyor-----	-	-	-	2	2	2	-	14	14
Stationary machinery-----	-	-	-	2	2	2	-	10	10
Suffocation (no flame or smoldering): Foreign gas-----	-	-	-	1	1	1	-	5	5
Miscellaneous causes:									
Flying particle from draft or wind-----	-	-	-	1	1	1	-	5	5
Acetylene or electric welding or cutting-----	-	-	-	3	3	3	-	7	7
Irritation or burn from caustic or acid-----	-	-	-	2	2	2	-	4	4
All other-----	-	-	-	1	1	1	-	4	4
Total or average, surface at underground-----	-	-	3	60	63	63	530	7	32
Total or average, underground mines-----	12	1	11	432	444	456	774	21	210
OPEN PIT MINES									
Sliding or falling material or objects:									
From car, bin, platform, or chute-----	-	-	-	1	1	1	-	10	10
From stockpile, dump, or gob-----	-	-	-	1	1	1	-	2	2
All other-----	-	-	-	1	1	1	-	9	9
Slips or falls of persons:									
On same level:									
While escaping another hazard-----	-	-	-	1	1	1	-	5	5
While handling material-----	-	-	-	7	7	7	-	6	6
While operating or moving machinery-----	-	-	-	4	4	4	-	22	22
All other-----	-	-	-	13	13	13	-	15	15
From an elevation:									
While handling material-----	-	-	-	4	4	4	-	16	16
While operating or moving machinery-----	-	-	-	7	7	7	-	13	13
Caused by failure of scaffold, ladder, or other support-----	-	-	-	3	3	3	-	146	146
All other-----	-	-	-	10	10	10	-	10	10
Handling material:									
Prop, stull, or timber-----	-	-	-	3	3	3	-	6	6
Ore, valuable mineral-----	-	-	-	8	8	8	-	19	19
Rock or waste-----	-	-	1	4	5	5	50	6	15
Rail-----	-	-	-	4	4	4	-	30	30
Flying particle while handling material-----	-	-	-	8	8	8	-	6	6
All other-----	-	-	1	65	66	66	300	26	30
Handtools:									
Pick-----	-	-	-	2	2	2	-	11	11
Hammer or sledge-----	-	-	-	2	2	2	-	30	30
Crowbar or bar-----	-	-	-	2	2	2	-	8	8
Shovel-----	-	-	-	1	1	1	-	5	5
Flying particle from tool or object worked on-----	-	-	1	8	9	9	180	13	31
All other-----	-	-	-	13	13	13	-	16	16
Stepping or kneeling on sharp or loose objects: Stepping on loose object-----	-	-	-	3	3	3	-	9	9

TABLE B-2. - Number and average severity of injuries by degree at nonmetal mines and mills in the United States, by general work location and detailed cause, 1971 - Continued

General work location and detailed cause by injury	Injuries					Average severity			
	Fatal	Nonfatal			All injuries	Permanent partial	Temporary total	All injuries	
		Permanent		Temporary total					Total nonfatal
		Total	Partial						
OPEN PIT MINES - Continued									
Haulage:									
Shuttle cars, transloaders, and small mobile trucks:									
Squeezed between shuttle car, transloader, or small mobile truck, and other object-----	-	-	-	1	1	1	-	110	110
All other-----	-	-	-	4	4	4	-	4	4
Railroad cars and locomotives-----	-	-	-	3	3	3	-	45	45
Automobiles, gasoline or diesel trucks:									
While operating-----	1	1	1	23	25	26	75	26	487
Slip or fall on or from-----	-	-	1	16	17	17	3,000	51	225
Miscellaneous haulage:									
Rope or cable on haulage-----	-	-	1	3	4	4	75	10	26
Slip or strain from moving car by hand-----	-	-	-	1	1	1	-	43	43
Flying particle-----	-	-	-	1	1	1	-	29	29
All other-----	-	-	-	1	1	1	-	1	1
Electricity: Transformer, generator, or stationary motor-----	-	-	-	1	1	1	-	30	30
Machinery:									
Belt conveyor-----	-	-	-	1	1	1	-	70	70
Chain, bucket, shaker, or screw conveyor-----	-	-	-	1	1	1	-	9	9
Power drill, rotary or percussive-----	-	-	1	7	8	8	300	22	57
Power shovel, dragline, bulldozer, etc.-----	1	-	1	23	24	25	600	33	294
Stationary machinery-----	-	-	-	3	3	3	-	45	45
While moving any machine except mining or loading-----	1	-	-	1	1	2	-	17	3,008
Particle set in motion by machinery-----	-	-	-	5	5	5	-	5	5
Fires or suffocation from fires: Oil, gasoline, other flammable liquid-----	-	-	-	1	1	1	-	12	12
Miscellaneous causes:									
Acetylene or electric welding or cutting-----	-	-	-	5	5	5	-	6	6
Burn from controlled fire-----	-	-	-	3	3	3	-	92	92
All other-----	-	-	1	7	8	8	900	9	120
Total or average, open pit mines-----	3	1	9	286	296	299	609	24	122
OTHER SURFACE MINING									
Handling material-----	-	-	-	1	1	1	-	1	1
Total or average, other surface mining-----	-	-	-	1	1	1	-	1	1
Total or average, mining-----	15	2	20	719	741	756	700	22	175
MILLS									
Sliding or falling material or objects:									
Timber or other support-----	-	-	-	1	1	1	-	1	1
Dropped or thrown by coworker-----	-	-	-	1	1	1	-	7	7
From car, bin, platform, or chute-----	-	-	-	12	12	12	-	21	21
Falling cage-----	-	-	-	1	1	1	-	7	7
All other-----	-	-	-	2	2	2	-	10	10
Slips or falls of persons:									
On same level:									
While handling material-----	-	-	-	37	37	37	-	32	32
Caused by handtool slipping or breaking-----	-	-	-	4	4	4	-	18	18
While operating or moving machinery-----	-	-	-	1	1	1	-	9	9
All other-----	-	-	1	84	85	85	50	33	33
From an elevation:									
While escaping another hazard-----	-	-	-	4	4	4	-	37	37
While handling material-----	-	-	1	30	31	31	50	47	47
Caused by handtool slipping or breaking-----	-	-	-	1	1	1	-	1	1
While operating or moving machinery-----	-	-	-	13	13	13	-	13	13
Caused by failure of scaffold, ladder, or other support-----	-	-	-	21	21	21	-	44	44
All other-----	-	-	-	66	66	66	-	19	19
Handling material:									
Prop, stull, or timber-----	-	-	1	14	15	15	50	7	10
Ore, valuable mineral-----	-	-	1	40	41	41	900	15	37
Rock or waste-----	-	-	-	10	10	10	-	10	10
Rail-----	-	-	-	20	20	20	-	11	11
Flying particle while loading car-----	-	-	-	2	2	2	-	1	1
Flying particle while handling material-----	-	-	-	42	42	42	-	6	6
All other-----	-	-	14	435	449	449	345	16	26
Handtools:									
Pick-----	-	-	-	1	1	1	-	2	2
Hammer or sledge-----	-	-	-	13	13	13	-	7	7
Crowbar or bar-----	-	-	-	14	14	14	-	16	16
Shovel-----	-	-	-	2	2	2	-	28	28
In hand of fellow worker-----	-	-	-	6	6	6	-	14	14
Flying particle from tool or object worked on-----	-	-	-	11	11	11	-	8	8
All other-----	-	-	1	27	28	28	50	10	11
Stepping or kneeling on sharp or loose objects:									
Stepping on sharp object-----	-	-	-	10	10	10	-	2	2
Stepping on loose object-----	-	-	-	10	10	10	-	20	20
Striking or bumping against objects-----	-	-	-	12	12	12	-	11	11

TABLE B-2. - Number and average severity of injuries by degree at nonmetal mines and mills in the United States, by general work location and detailed cause, 1971 - Continued

General work location and detailed cause by injury	Injuries					Average severity			
	Fatal	Nonfatal				All injuries	Permanent partial	Temporary total	All injuries
		Permanent		Temporary total	Total nonfatal				
		Total	Partial						
MILLS - Continued									
Haulage:									
Cages, cars, or motors:									
Struck, run over, or squeezed between:									
Pulling, pushing, or dropping-----	-	-	-	5	5	5	-	4	4
Operating or riding-----	-	-	-	1	1	1	-	13	13
All other-----	-	-	-	3	3	3	-	6	6
Squeezed between cage, car, or motor, and other object:									
Switching, spragging, blocking, or braking-----	-	-	-	1	1	1	-	16	16
Pulling, pushing, or dropping-----	-	-	-	7	7	7	-	16	16
Operating or riding-----	-	-	-	1	1	1	-	65	65
All other-----	-	-	-	3	3	3	-	30	30
Falling, slipping, or jumping into or from-----	-	-	-	5	5	5	-	36	36
Shuttle cars, transloaders, and small mobile trucks:									
Struck or run over-----	-	-	-	14	14	14	-	36	36
Squeezed between shuttle car, transloader, or small mobile truck, and other object-----	-	-	1	5	6	6	110	13	29
All other-----	-	-	1	46	47	47	75	21	22
Railroad cars and locomotives-----	3	-	-	69	69	72	-	25	274
Automobiles, gasoline or diesel trucks:									
While operating-----	-	-	2	28	30	30	735	21	69
Slip or fall on or from-----	-	-	1	28	29	29	4,500	27	181
Water transportation: Rope or chain on boat or barge-----	-	-	-	1	1	1	-	2	2
Miscellaneous haulage:									
Rope or cable on haulage-----	-	-	-	18	18	18	-	13	13
Slip or strain from moving car by hand-----	-	-	-	33	33	33	-	21	21
Flying particle-----	-	-	-	2	2	2	-	14	14
All other-----	-	-	-	22	22	22	-	11	11
Explosions of gas or dust-----	-	-	-	2	2	2	-	180	180
Electricity:									
Power or lighting circuit-----	-	-	-	2	2	2	-	13	13
Locomotive or shuttle car-----	-	-	-	1	1	1	-	27	27
Cutout switch or junction box-----	-	-	1	4	5	5	100	8	26
Machinery:									
Belt conveyor-----	-	-	6	40	46	46	328	29	68
Chain, bucket, shaker, or screw conveyor-----	-	-	1	3	4	4	235	5	63
Power drill, rotary or percussive-----	-	-	-	10	10	10	-	9	9
Power shovel, dragline, bulldozer, etc.-----	3	-	2	23	25	28	525	17	694
Stationary machinery-----	3	1	10	80	91	94	652	25	346
While moving any machine except mining or loading-----	-	-	-	5	5	5	-	11	11
Particle set in motion by machinery-----	-	-	-	6	6	6	-	2	2
Suffocation (no flame or smoldering):									
Natural mine gas or oxygen deficient-----	-	-	-	1	1	1	-	10	10
Foreign gas-----	-	-	-	6	6	6	-	9	9
Fires or suffocation from fires:									
Oil, gasoline, other flammable liquid-----	-	-	-	1	1	1	-	1	1
All other-----	-	-	-	1	1	1	-	7	7
Miscellaneous causes:									
Flying particle from draft or wind-----	-	-	-	4	4	4	-	3	3
Carbide - gas or burns from-----	-	-	-	1	1	1	-	12	12
Acetylene or electric welding or cutting-----	-	-	-	17	17	17	-	10	10
Irritation or burn from caustic or acid-----	-	-	-	20	20	20	-	9	9
Burn from controlled fire-----	-	-	-	24	24	24	-	20	20
All other-----	-	-	-	30	30	30	-	27	27
Pneumoconiosis-----	-	1	1	-	2	2	2,000	-	4,000
Total or average, mills-----	9	2	45	1,520	1,567	1,576	533	20	76
Grand total or average-----	24	4	65	2,239	2,308	2,332	584	21	108

TABLE B-3. - Fatal injuries and distribution by part of body injured at nonmetal mines and mills in the United States,
by general work location and detailed cause, 1971

General work location and detailed cause	Injuries									Percentage distribution	
	Head, face, neck (excl. eye)	Eye	Trunk	Arm (above wrist)	Wrist, hand, fingers	Leg (above ankle)	Ankle, foot, toes	Multiple	Unclassified (no data)		Total
UNDERGROUND MINES											
Underground (including shaft and slope):											
Falls of roof or back:											
While mining-----	-	-	-	-	-	-	-	2	-	2	16.67
While loading-----	-	-	1	-	-	-	-	-	-	1	8.33
Explosives: Flying fragments-----	1	-	-	-	-	-	-	-	-	1	8.33
Machinery: Stationary machinery-----	-	-	-	-	-	-	-	1	-	1	8.33
Suffocation (no flame or smoldering): Natural mine gas or oxygen deficient-----	-	-	7	-	-	-	-	-	-	7	58.33
Total, underground mines-----	1	-	8	-	-	-	-	3	-	12	-
Percentage distribution-----	8.33	-	66.67	-	-	-	-	25.00	-	-	-
ALL SURFACE MINES											
Haulage:											
Automobiles, gasoline or diesel trucks: While operating-----	-	-	-	-	-	-	-	1	-	1	33.33
Machinery:											
Power shovel, dragline, bulldozer, etc.-----	-	-	-	-	-	-	-	1	-	1	33.33
While moving any machine except mining or loading-----	-	-	1	-	-	-	-	-	-	1	33.33
Total, surface mines-----	-	-	1	-	-	-	-	2	-	3	-
Percentage distribution-----	-	-	33.33	-	-	-	-	66.67	-	-	-
Total, mining-----	1	-	9	-	-	-	-	5	-	15	-
Percentage distribution-----	6.67	-	60.00	-	-	-	-	33.33	-	-	-
MILLS											
Haulage: Railroad cars and locomotives-----	1	-	-	-	-	1	-	1	-	3	33.33
Machinery:											
Power shovel, dragline, bulldozer, etc.-----	2	-	-	-	-	-	-	1	-	3	33.33
Stationary machinery-----	-	-	-	-	-	2	-	1	-	3	33.33
Total, mills-----	3	-	-	-	-	3	-	3	-	9	-
Percentage distribution-----	33.33	-	-	-	-	33.33	-	33.33	-	-	-
Grand total-----	4	-	9	-	-	3	-	8	-	24	-
Percentage distribution-----	16.67	-	37.50	-	-	12.50	-	33.33	-	-	-

TABLE B-4. - Injuries, distribution, average severity by degree, and injury rates at nonmetal mines and mills in the United States, by general work location and part of body injured, 1971

General work location and part of body injured	Injuries						Percent- age distrib- ution of all injuries 1/	Average severity			Frequency rates per million man-hours		Severity rates per million man-hours	
	Fatal	Nonfatal				All injuries		Perma- nent partial	Tempo- rary total	All injuries	Fatal	Non- fatal	Fatal	Non- fatal
		Permanent		Tempo- rary total	Total non- fatal									
		Total	Partial											
UNDERGROUND MINES														
Underground (including shaft and slope):														
Head, face, neck (excl. eye)-----	1	1	-	25	26	27	7.0	-	18	461	0.12	3.01	695	747
Eye-----	-	-	-	13	13	13	3.4	-	20	20	-	1.51	-	30
Trunk-----	8	-	1	131	132	140	36.2	50	26	367	.93	15.30	5,562	393
Arm (above wrist)-----	-	-	1	15	16	16	4.1	4,500	22	302	-	1.85	-	559
Wrist, hand, fingers-----	-	-	5	59	64	64	16.5	174	19	31	-	7.42	-	231
Leg (above ankle)-----	-	-	-	48	48	48	12.4	-	40	40	-	5.56	-	223
Ankle, foot, toes-----	-	-	-	52	52	52	13.4	-	12	12	-	6.03	-	75
Multiple-----	3	-	1	23	24	27	7.0	1,500	19	739	.35	2.78	2,086	226
Unclassified (no data)-----	-	-	-	6	6	6	-	-	24	24	-	.70	-	17
Total or average-----	12	1	8	372	381	393	-	865	23	238	1.39	44.15	8,343	2,501
Surface at underground:														
Head, face, neck (excl. eye)-----	-	-	-	3	3	3	4.9	-	3	3	-	1.12	-	3
Eye-----	-	-	-	5	5	5	8.2	-	4	4	-	1.87	-	7
Trunk-----	-	-	-	24	24	24	39.3	-	9	9	-	8.96	-	81
Arm (above wrist)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wrist, hand, fingers-----	-	-	3	11	14	14	23.0	530	6	118	-	5.23	-	619
Leg (above ankle)-----	-	-	-	7	7	7	11.5	-	5	5	-	2.61	-	13
Ankle, foot, toes-----	-	-	-	6	6	6	9.8	-	10	10	-	2.24	-	22
Multiple-----	-	-	-	2	2	2	3.3	-	4	4	-	.75	-	3
Unclassified (no data)-----	-	-	-	2	2	2	-	-	17	17	-	.75	-	13
Total or average-----	-	-	3	60	63	63	-	530	7	32	-	23.51	-	761
Total or average, underground mines-----	12	1	11	432	444	456	-	774	21	210	1.06	39.26	6,366	2,089
OPEN PIT MINES														
Head, face, neck (excl. eye)-----	-	1	-	9	10	10	3.9	-	13	612	-	.59	-	358
Eye-----	-	-	1	21	22	22	8.6	180	8	15	-	1.29	-	20
Trunk-----	1	-	4	85	89	90	35.0	1,138	24	140	.06	5.21	351	386
Arm (above wrist)-----	-	-	-	6	6	6	2.3	-	33	33	-	.35	-	12
Wrist, hand, fingers-----	-	-	2	38	40	40	15.6	75	14	17	-	2.34	-	41
Leg (above ankle)-----	-	-	-	33	33	33	12.8	-	36	36	-	1.93	-	69
Ankle, foot, toes-----	-	-	2	42	44	44	17.1	300	31	43	-	2.58	-	112
Multiple-----	2	-	-	10	10	12	4.7	-	61	1,051	.12	.59	703	36
Unclassified (no data)-----	-	-	-	42	42	42	-	-	17	17	-	2.46	-	42
Total or average-----	3	1	9	286	296	299	-	609	24	122	.18	17.33	1,054	1,075
OTHER SURFACE MINING														
Head, face, neck (excl. eye)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eye-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trunk-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arm (above wrist)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wrist, hand, fingers-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leg (above ankle)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ankle, foot, toes-----	-	-	-	1	1	1	100.0	-	1	1	-	5.95	-	6
Multiple-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unclassified (no data)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average-----	-	-	-	1	1	1	-	-	1	1	-	5.95	-	6
Total or average, mining-----	15	2	20	719	741	756	-	700	22	175	.53	25.95	3,152	1,470
MILLS														
Head, face, neck (excl. eye)-----	3	-	-	50	50	53	3.9	-	13	352	.05	.90	323	11
Eye-----	-	-	1	76	77	77	5.7	1,800	6	30	-	1.38	-	41
Trunk-----	-	1	13	435	449	449	33.1	492	22	49	-	8.06	-	397
Arm (above wrist)-----	-	-	2	62	64	64	4.7	2,340	26	98	-	1.15	-	113
Wrist, hand, fingers-----	-	-	26	246	272	272	20.1	398	16	52	-	4.88	-	256
Leg (above ankle)-----	3	1	1	149	151	154	11.4	450	23	181	.05	2.71	323	178
Ankle, foot, toes-----	-	-	2	227	229	229	16.9	138	17	18	-	4.11	-	75
Multiple-----	3	-	-	55	55	58	4.3	-	32	341	.05	.99	323	32
Unclassified (no data)-----	-	-	-	220	220	220	-	-	20	20	-	3.95	-	81
Total or average, mills-----	9	2	45	1,520	1,567	1,576	-	533	20	76	.16	28.12	969	1,184
Grand total or average-----	24	4	65	2,239	2,308	2,332	-	584	21	108	.28	27.39	1,709	1,281

1/ Number of injuries for which part of body is "Unclassified" is excluded in calculating percentages. Therefore, 100 percent for underground is 387; for surface, 61; for open pit, 257; for other surface mining, 1; and for mills, 1,336. Distribution percentages may not add to 100.0 because of independent rounding.

TABLE B-5. - Injuries, distribution, average severity by degree, and injury rates at nonmetal mines and mills in the United States, by general work location and nature of injury, 1971

General work location and nature of injury	Injuries					Percentage distribution of all injuries 1/	Average severity			Frequency rates per million man-hours		Severity rates per million man-hours		
	Fatal	Nonfatal			All injuries		Perma- nent partial	Tempo- rary total	All injuries	Fatal	Non- fatal	Fatal	Non- fatal	
		Permanent		Tempo- rary total										Total non- fatal
		Total	Partial											
UNDERGROUND MINES														
Underground (including shaft and slope):														
Amputation, enucleation-----	-	-	6	-	6	6	1.6	895	-	895	-	0.70	-	622
Asphyxiation-----	7	-	-	2	2	9	2.3	-	2	4,667	0.81	.23	4,867	(2/)
Crushing, contusion, bruise-----	4	-	-	107	107	111	28.7	-	11	227	.46	12.40	2,781	141
Burn, scald (except chemical)-----	-	-	-	9	9	9	2.3	-	16	16	-	1.04	-	16
Chemical burn-----	-	-	-	2	2	2	.5	-	3	3	-	.23	-	1
Cut, laceration, puncture-----	-	-	-	49	49	49	12.7	-	20	20	-	5.68	-	111
Foreign body in eye-----	-	-	-	7	7	7	1.8	-	34	34	-	.81	-	28
Fracture-----	1	1	1	47	49	50	12.9	1,500	49	316	.12	5.68	695	1,135
Hernia (inguinal)-----	-	-	1	4	5	5	1.3	50	64	61	-	.58	-	36
Strain, sprain, dislocation-----	-	-	-	134	134	134	34.6	-	24	24	-	15.53	-	371
Pneumoconiosis (except silicosis)-----	-	-	-	1	1	1	.3	-	66	66	-	.12	-	8
Concussion (cerebral)-----	-	-	-	3	3	3	.8	-	39	39	-	.35	-	13
Hernia (except inguinal)-----	-	-	-	1	1	1	.3	-	17	17	-	.12	-	2
Unclassified (no data)-----	-	-	-	6	6	6	-	-	24	24	-	.70	-	17
Total or average-----	12	1	8	372	381	393	-	865	23	238	1.39	44.15	8,343	2,501
Surface at underground:														
Amputation, enucleation-----	-	-	3	-	3	3	4.9	530	-	530	-	1.12	-	593
Asphyxiation-----	-	-	-	1	1	1	1.6	-	5	5	-	.37	-	2
Crushing, contusion, bruise-----	-	-	-	6	6	6	9.8	-	5	5	-	2.24	-	11
Burn, scald (except chemical)-----	-	-	-	4	4	4	6.6	-	7	7	-	1.49	-	10
Chemical burn-----	-	-	-	2	2	2	3.3	-	4	4	-	.75	-	3
Radiation, radiating substance-----	-	-	-	1	1	1	1.6	-	1	1	-	.37	-	(2/)
Cut, laceration, puncture-----	-	-	-	6	6	6	9.8	-	9	9	-	2.24	-	19
Dermatitis-----	-	-	-	2	2	2	3.3	-	3	3	-	.75	-	2
Foreign body in eye-----	-	-	-	1	1	1	1.6	-	5	5	-	.37	-	2
Fracture-----	-	-	-	2	2	2	3.3	-	5	5	-	.75	-	4
Hernia (inguinal)-----	-	-	-	1	1	1	1.6	-	39	39	-	.37	-	15
Strain, sprain, dislocation-----	-	-	-	32	32	32	52.5	-	7	7	-	11.94	-	86
Unclassified (no data)-----	-	-	-	2	2	2	-	-	17	17	-	.75	-	13
Total or average-----	-	-	3	60	63	63	-	530	7	32	-	23.51	-	761
Total or average, underground mines-----	12	1	11	432	444	456	-	774	21	210	1.06	39.26	6,366	2,089
OPEN PIT MINES														
Amputation, enucleation-----	-	-	4	-	4	4	1.6	188	-	188	-	.23	-	44
Asphyxiation-----	-	-	-	3	3	3	1.2	-	8	8	-	.18	-	1
Crushing, contusion, bruise-----	2	-	-	53	53	55	21.4	-	17	235	.12	3.10	703	53
Burn, scald (except chemical)-----	-	-	-	8	8	8	3.1	-	42	42	-	.47	-	20
Chemical burn-----	-	-	-	1	1	1	.4	-	28	28	-	.06	-	2
Radiation, radiating substance-----	-	-	-	2	2	2	.8	-	4	4	-	.12	-	1
Cut, laceration, puncture-----	-	-	-	24	24	24	9.3	-	17	17	-	1.41	-	23
Dermatitis-----	-	-	-	1	1	1	.4	-	1	1	-	.06	-	(2/)
Foreign body in eye-----	-	-	1	18	19	19	7.4	180	7	16	-	1.11	-	18
Fracture-----	1	-	-	36	36	37	14.4	-	55	215	.06	2.11	351	116
Hernia (inguinal)-----	-	-	1	4	5	5	1.9	50	53	53	-	.29	-	15
Poisoning (systemic)-----	-	-	-	1	1	1	.4	-	1	1	-	.06	-	(2/)
Strain, sprain, dislocation-----	-	-	3	89	92	92	35.8	1,500	22	71	-	5.39	-	380
Concussion (cerebral)-----	-	1	-	-	1	1	.4	-	-	6,000	-	.06	-	351
Hernia (except inguinal)-----	-	-	-	3	3	3	1.2	-	50	50	-	.18	-	9
Inflammation or irritation of joints, tendons, muscles-----	-	-	-	1	1	1	.4	-	4	4	-	.06	-	(2/)
Unclassified (no data)-----	-	-	-	42	42	42	-	-	17	17	-	2.46	-	42
Total or average-----	3	1	9	286	296	299	-	609	24	122	.18	17.33	1,054	1,075
OTHER SURFACE MINING														
Crushing, contusion, bruise-----	-	-	-	1	1	1	100.0	-	1	1	-	5.95	-	6
Total or average-----	-	-	-	1	1	1	-	-	1	1	-	5.95	-	6
Total or average, mining-----	15	2	20	719	741	756	-	700	22	175	.53	25.95	3,152	1,470

1/ Number of injuries for which nature of injury is "Unclassified" is excluded in calculating percentages. Therefore, 100 percent for underground is 387; for surface, 61; for open pit, 257; for other surface mining, 1; and for mills, 1,356. Distribution percentages may not add to 100.0 because of independent rounding.

2/ Less than 0.5.

TABLE B-5. - Injuries, distribution, average severity by degree, and injury rates at nonmetal mines and mills in the United States, by general work location and nature of injury, 1971 - Continued

General work location and nature of injury	Injuries						Percent- age distrib- ution of all injuries 1/	Average severity			Frequency rates per million man-hours		Severity rates per million man-hours	
	Fatal	Nonfatal				All injuries		Perma- nent partial	Tempo- rary total	All injuries	Fatal	Non- fatal	Fatal	Non- fatal
		Permanent		Tempo- rary total	Total non- fatal									
		Total	Partial											
MILLS														
Amputation, enucleation-----	2	1	27	-	28	30	2.2	574	-	1,116	0.04	0.50	215	386
Asphyxiation-----	-	-	-	9	9	9	.7	-	9	9	-	.16	-	1
Crushing, contusion, bruise-----	7	-	1	352	353	360	26.5	75	12	128	.13	6.33	754	75
Burn, scald (except chemical)-----	-	-	-	40	40	40	2.9	-	25	25	-	.72	-	18
Chemical burn-----	-	-	-	20	20	20	1.5	-	8	8	-	.36	-	3
Radiation, radiating substance-----	-	-	-	8	8	8	.6	-	8	8	-	.14	-	1
Cut, laceration, puncture-----	-	-	1	161	162	162	11.9	180	12	13	-	2.91	-	39
Dermatitis-----	-	-	-	2	2	2	.1	-	4	4	-	.04	-	(2/)
Electric shock-----	-	-	-	2	2	2	.1	-	10	10	-	.04	-	(2/)
Foreign body in eye-----	-	-	-	59	59	59	4.4	-	6	6	-	1.06	-	6
Fracture-----	-	-	3	153	156	156	11.5	605	44	55	-	2.80	-	154
Heat exhaustion, sunstroke-----	-	-	-	4	4	4	.3	-	5	5	-	.07	-	(2/)
Hernia (inguinal)-----	-	-	10	15	25	25	1.8	50	50	50	-	.45	-	22
Poisoning (systemic)-----	-	-	-	1	1	1	.1	-	2	2	-	.02	-	(2/)
Strain, sprain, dislocation-----	-	-	2	463	465	465	34.3	1,950	20	28	-	8.34	-	234
Silicosis-----	-	1	1	-	2	2	.1	2,000	-	4,000	-	.04	-	144
Concussion (cerebral)-----	-	-	-	1	1	1	.1	-	265	265	-	.02	-	5
Hernia (except inguinal)-----	-	-	-	9	9	9	.7	-	84	84	-	.16	-	14
Inflammation or irritation of joints, tendons, muscles-----	-	-	-	1	1	1	.1	-	28	28	-	.02	-	1
Unclassified (no data)-----	-	-	-	220	220	220	-	-	20	20	-	3.95	-	81
Total or average, mills-----	9	2	45	1,520	1,567	1,576	-	533	20	76	.16	28.12	969	1,184
Grand total or average-----	24	4	65	2,239	2,308	2,332	-	584	21	108	.28	27.39	1,709	1,281

1/ Number of injuries for which nature of injury is "Unclassified" is excluded in calculating percentages. Therefore, 100 percent for underground is 387; for surface, 61; for open pit, 257; for other surface mining, 1; and for mills, 1,356. Distribution percentages may not add to 100.0 because of independent rounding.

2/ Less than 0.5.

TABLE B-6. - Injury experience and worktime data on nonmetal mines and mills in the United States, by general work location and employment size group, 1971

General work location and employment size group	Injuries		Frequency rates per million man-hours			Severity rates per million man-hours			Active operations	Average men working daily	Average days active	Man-days worked	Man-hours worked
	Fatal	Nonfatal	Fatal	Nonfatal	Total	Fatal	Nonfatal	Total					
Underground mines (includes surface work):													
1-49	1	7	2.73	35.76	35.76	16,355	930	930	51	141	169	23,819	195,755
5-99	20	21	8.36	34.22	37.24	50,144	1,706	18,061	32	208	219	45,042	366,858
100-149	8	44	2.73	37.61	40.34	50,144	917	51,061	35	486	246	119,820	957,261
150-199	36	55	8.36	38.84	46.84	50,144	1,606	1,606	13	337	287	798,983	798,983
200-249	21	21	8.36	42.15	42.15	50,144	1,606	1,606	13	337	287	62,274	498,198
250-299	64	64	43.64	43.64	87.28	2,117	2,117	2,117	10	217	269	192,753	1,536,972
300-349	122	123	35.76	43.64	43.64	2,117	2,117	2,117	10	217	269	332,136	2,834,666
350-399	89	90	39.25	35.76	35.76	2,117	2,117	2,117	10	217	269	332,136	2,834,666
400-449	1	39	1.06	19.13	19.13	3,827	879	4,706	5	288	342	317,018	2,352,943
450-499	30	31	6.64	19.13	19.13	3,827	879	4,706	2	618	320	197,587	1,567,847
Total or average	12	444	1.06	39.26	40.32	6,366	2,089	8,455	163	4,818	293	1,409,350	11,309,406
Open pit mines:													
1-49	2	72	.56	20.14	20.70	3,357	850	4,207	1,375	2,614	169	441,268	3,574,757
50-99	1	42	.34	14.21	14.55	2,031	437	2,467	285	1,819	196	356,406	2,954,835
100-149	60	60	24.72	24.72	24.72	1,600	1,600	1,600	92	1,203	244	293,137	2,426,917
150-199	36	36	23.22	23.22	23.22	1,212	1,212	1,212	28	747	256	180,922	1,550,524
200-249	11	11	10.22	10.22	10.22	592	592	592	11	443	304	134,498	1,075,995
250-299	46	46	12.81	12.81	12.81	1,889	1,889	1,889	22	1,499	295	461,912	3,591,558
300-349	28	28	22.84	22.84	22.84	595	595	595	4	525	292	153,257	1,226,057
350-399	1	1	1.48	1.48	1.48	163	163	163	2	329	257	84,597	676,779
Total or average	3	296	.18	17.33	17.51	1,054	1,075	2,129	1,819	9,179	228	2,095,997	17,077,422
Other surface mining:													
1-49	1	1	-	20.26	20.26	-	20	20	13	22	280	6,171	49,364
50-99	-	-	-	-	-	-	-	-	1	5	170	850	6,798
100-149	-	-	-	-	-	-	-	-	4	45	311	13,993	111,944
Total or average	-	1	-	5.95	5.95	-	6	6	18	72	292	21,014	168,106
Total or average, mining	15	741	.53	25.95	26.48	3,152	1,470	4,622	2,000	14,069	251	3,526,361	28,554,934
Mills:													
1-49	3	37	3.33	41.12	44.46	20,006	8,721	28,727	241	528	208	110,039	899,717
50-99	-	57	-	29.28	29.28	-	1,031	1,031	142	943	233	238,679	1,946,831
100-149	1	178	.19	34.14	34.33	1,151	1,039	2,190	171	2,459	263	646,975	5,213,815
150-199	289	289	31.87	31.87	31.87	1,028	1,615	1,615	151	3,990	282	1,126,403	9,066,874
200-249	1	211	.17	36.16	36.33	697	1,117	2,145	62	2,541	285	723,389	5,835,403
250-299	2	487	.12	28.28	28.40	971	1,170	1,867	108	7,386	290	2,141,191	17,218,651
300-349	1	37	.16	9.23	9.39	971	365	1,336	21	2,625	293	768,299	6,178,542
350-399	1	102	.22	21.27	21.47	1,314	615	615	11	2,159	278	600,475	4,795,807
400-449	1	149	.22	32.84	32.84	969	912	2,226	5	1,689	338	570,922	4,567,389
Total or average, mills	9	1,567	.16	28.12	28.28	969	1,184	2,153	912	24,320	285	6,926,372	55,723,029
Grand total or average	24	2,308	.28	27.39	27.67	1,709	1,281	2,989	2,912	38,389	272	10,452,733	84,277,963

TABLE B-7. - Injuries by degree at nonmetal mines and mills in the United States, by State ^{1/}, 1971

State	Injuries											
	At mines						At mills					
	Fatal	Nonfatal				All injuries	Fatal	Nonfatal				All injuries
		Permanent		Temporary total	Total non-fatal			Permanent		Temporary total	Total non-fatal	
		Total	Partial					Total	Partial			
Alabama-----	-	-	-	13	13	13	1	-	-	20	20	21
Arizona-----	1	-	-	3	3	4	-	-	-	18	18	18
Arkansas-----	-	-	-	21	21	21	-	-	2	49	51	51
California-----	-	-	-	47	47	47	-	1	3	192	196	196
Colorado-----	-	-	-	7	7	7	-	-	1	10	11	11
Connecticut-----	-	-	-	2	2	2	-	-	-	2	2	2
Florida-----	-	-	2	27	29	29	1	-	5	44	49	50
Georgia-----	-	-	-	34	34	34	1	1	5	211	217	218
Hawaii-----	-	-	-	2	2	2	-	-	-	1	1	1
Idaho-----	1	-	-	3	3	4	-	-	1	7	8	8
Illinois-----	7	-	2	30	32	39	-	-	1	58	59	59
Indiana-----	-	-	-	4	4	4	-	-	1	12	13	13
Iowa-----	-	-	-	3	3	3	-	-	-	48	48	48
Kansas-----	-	-	-	3	3	3	-	-	2	31	33	33
Kentucky-----	-	-	1	35	36	36	-	-	-	18	18	18
Louisiana-----	-	-	1	50	51	51	-	-	1	35	36	36
Maine-----	-	-	-	2	2	2	-	-	-	6	6	6
Maryland-----	-	-	-	-	-	-	-	-	-	6	6	6
Massachusetts-----	-	-	-	-	-	-	-	-	-	16	16	16
Michigan-----	-	-	-	26	26	26	-	-	1	25	26	26
Minnesota-----	-	-	-	-	-	-	1	-	-	11	11	12
Mississippi-----	-	-	-	-	-	-	-	-	-	23	23	23
Missouri-----	1	-	1	17	18	19	-	-	1	24	25	25
Montana-----	-	-	1	16	17	17	-	-	-	21	21	21
Nevada-----	-	-	-	8	8	8	-	-	1	33	34	34
New Hampshire-----	-	-	-	-	-	-	-	-	-	1	1	1
New Jersey-----	-	-	-	1	1	1	1	-	-	18	18	19
New Mexico-----	3	-	6	136	142	145	1	-	1	23	24	25
New York-----	-	-	1	40	41	41	-	-	2	36	38	38
North Carolina-----	-	-	-	18	18	18	2	-	5	89	94	96
Ohio-----	1	-	2	45	47	48	-	-	3	59	62	62
Oklahoma-----	-	-	1	6	7	7	-	-	1	31	32	32
Oregon-----	-	-	-	-	-	-	-	-	-	1	1	1
Pennsylvania-----	-	-	1	20	21	21	-	-	1	69	70	70
South Carolina-----	-	-	-	9	9	9	-	-	1	68	69	69
South Dakota-----	-	-	-	2	2	2	1	-	1	8	9	10
Tennessee-----	-	-	-	11	11	11	-	-	1	21	22	22
Texas-----	-	-	1	16	17	17	-	-	3	119	122	122
Utah-----	1	-	-	31	31	32	-	-	-	3	3	3
Vermont-----	-	1	-	14	15	15	-	-	-	9	9	9
Virginia-----	-	1	-	3	4	4	-	-	1	15	16	16
Washington-----	-	-	-	-	-	-	-	-	-	3	3	3
West Virginia-----	-	-	-	1	1	1	-	-	-	3	3	3
Wyoming-----	-	-	-	13	13	13	-	-	-	23	23	23
Total-----	15	2	20	719	741	756	9	2	45	1,520	1,567	1,576

^{1/} No injuries were reported at nonmetal mines and mills for States not listed.

TABLE B-8. - Fatal injuries by general work location and main cause at nonmetal mines and mills in the United States, by State 1/1, 1971

State	Underground mines					Open pit mines			Total, mining activities	Mills			Grand total
	Falls of roof or back	Explosives	Machinery	Suffocation (no flame or smoldering)	Total, underground workings	Haulage	Machinery	Total, open pit mines		Haulage	Machinery	Total, mills	
Alabama-----	1				1				1		1	1	1
Arizona-----		1			1								1
Florida-----													1
Georgia-----													1
Idaho-----						1		1	1				1
Illinois-----				7	7				7				7
Minnesota-----									1				1
Missouri-----							1	1	1				1
New Jersey-----													1
New Mexico-----									3				4
North Carolina-----	2		1		3					1	1	1	2
Ohio-----							1	1	1				1
South Dakota-----									1				1
Utah-----	1				1								1
Total-----	3	1	1	7	12	1	2	3	15	3	6	9	24

1/ No fatal injuries were reported at nonmetal mines and mills for work locations or States not listed.

TABLE B-9. - Nonfatal injuries by general work location and main cause at nonmetal mines and mills in the United States, by State 1/1, 1971 - Continued

State	Open pit mines										Other surface mining		Mills										Total, mills	Grand total								
	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Haulage	Electricity	Machinery	Fires or suffocation from fires	Miscellaneous causes	Total, open pit	Handling material	Total, other surface mining	Total, mining activities	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust			Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires	Miscellaneous causes	Pneumoconiosis		
Alabama-----	-	1	4	1	-	1	-	4	-	2	13	-	-	13	1	1	6	1	1	1	-	5	-	-	2	-	-	3	-	20	33	
Arizona-----	-	1	-	-	-	-	-	-	-	-	2	-	-	2	1	1	10	2	-	-	-	2	-	-	-	-	-	1	-	18	21	
Arkansas-----	-	-	-	-	-	-	-	-	-	-	2	-	-	2	1	8	14	-	-	-	-	-	-	-	-	-	-	9	51	72		
California-----	1	7	15	5	1	5	-	2	-	4	47	1	1	21	2	23	94	12	3	3	-	24	-	-	25	3	10	196	243			
Colorado-----	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-	1	4	-	-	-	-	-	-	-	-	-	-	-	2	4	4	
Connecticut-----	-	6	10	5	1	3	1	1	-	2	29	-	-	29	1	9	23	1	2	-	-	-	-	-	-	-	-	3	49	78		
Florida-----	-	6	16	2	-	5	-	1	-	2	33	-	-	34	1	40	72	12	2	2	47	-	-	32	4	-	8	1	217	251		
Georgia-----	-	1	1	1	-	-	-	-	-	-	2	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	
Hawaii-----	-	-	-	-	-	2	-	-	-	-	3	-	-	3	-	-	5	-	-	-	-	-	-	-	-	-	-	-	2	1	1	
Idaho-----	-	-	-	-	-	2	-	-	-	-	3	-	-	3	-	-	17	15	-	-	-	-	-	-	-	-	-	-	1	59	91	
Illinois-----	-	-	-	-	-	2	-	-	-	-	3	-	-	3	-	2	1	-	-	-	-	-	-	-	-	-	-	-	1	13	17	
Indiana-----	-	-	-	-	-	1	-	-	-	-	3	-	-	3	-	11	18	2	-	-	-	-	-	-	-	-	-	-	1	4	13	
Iowa-----	-	1	1	-	-	1	-	-	-	-	3	-	-	3	-	5	19	2	-	-	-	-	-	-	-	-	-	-	3	36	51	
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	7	2	-	-	-	-	-	-	-	-	-	-	3	33	36	
Kentucky-----	1	2	3	-	-	2	-	4	-	-	12	-	-	36	-	9	11	4	-	-	-	-	-	-	-	-	-	-	1	18	54	
Louisiana-----	-	2	1	-	-	1	-	-	-	-	4	-	-	51	-	9	11	4	-	-	-	-	-	-	-	-	-	-	3	36	87	
Maine-----	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	6	8	6
Maryland-----	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	1	2	1	1	-	-	-	-	-	-	-	-	-	-	1	1	1
Massachusetts-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	6	-	-	-	-	-	-	-	-	-	-	-	6	6	6
Michigan-----	-	5	4	-	-	3	-	3	-	-	15	-	-	26	-	2	11	1	-	-	-	-	-	-	-	-	-	-	-	16	16	16
Minnesota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	2	1	2	-	-	-	-	-	-	-	-	-	-	26	52	26
Mississippi-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	3	1	-	-	-	-	-	-	-	-	-	-	-	11	11	11
Missouri-----	1	5	4	1	3	3	-	3	-	1	18	-	-	18	-	4	9	-	1	1	-	-	-	-	-	-	-	-	2	23	23	
Montana-----	-	1	2	1	-	3	-	4	-	-	7	-	-	17	-	6	13	2	-	-	-	-	-	-	-	-	-	-	3	38	42	
Nevada-----	-	-	-	-	-	-	-	-	-	-	6	-	-	8	-	1	2	1	-	-	-	-	-	-	-	-	-	-	2	34	42	1
New Hampshire-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1
New Jersey-----	-	-	-	-	-	1	-	-	-	-	1	-	-	1	-	3	4	1	-	-	-	-	-	-	-	-	-	-	-	19	19	19
New Mexico-----	-	1	1	1	-	1	-	-	-	-	-	-	-	142	-	5	6	1	-	-	-	-	-	-	-	-	-	-	-	18	166	166
New York-----	3	5	5	1	-	6	-	3	-	-	3	-	-	41	-	12	10	-	-	-	-	-	-	-	-	-	-	-	38	79	79	
North Carolina-----	1	1	1	1	-	-	-	-	-	-	18	-	-	18	-	15	33	7	1	1	-	-	-	-	-	-	-	-	6	94	112	
Ohio-----	2	2	2	-	-	2	-	2	-	-	5	-	-	47	-	12	19	1	-	-	-	-	-	-	-	-	-	-	5	62	109	
Oklahoma-----	-	1	2	-	-	-	-	-	-	-	7	-	-	7	-	8	11	-	-	-	-	-	-	-	-	-	-	-	3	32	39	39
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1
Pennsylvania-----	3	1	1	1	-	3	-	3	-	-	8	-	-	21	-	12	31	1	1	-	-	-	-	-	-	-	-	-	-	70	91	91
Florida-----	-	-	-	-	-	1	-	-	-	-	9	-	-	9	-	3	3	2	-	-	-	-	-	-	-	-	-	-	-	69	78	78
South Carolina-----	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1
South Dakota-----	-	1	2	2	-	5	-	1	-	-	11	-	-	11	-	6	6	1	-	-	-	-	-	-	-	-	-	-	2	22	33	33
Tennessee-----	-	1	2	1	-	2	-	-	-	-	13	-	-	17	2	14	44	5	3	-	-	-	-	-	-	-	-	-	-	122	139	139
Texas-----	1	2	5	1	-	2	-	1	-	-	31	-	-	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	34	34
Utah-----	-	-	-	-	-	1	-	-	-	-	2	-	-	15	-	3	1	-	-	-	-	-	-	-	-	-	-	-	-	9	24	24
Vermont-----	-	-	2	-	-	1	-	-	-	-	3	-	-	4	-	2	6	2	1	-	-	-	-	-	-	-	-	-	-	16	20	20
Virginia-----	-	-	-	-	-	1	-	-	-	-	2	-	-	2	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	3	3	3
Washington-----	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	3
West Virginia-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4
Wyoming-----	-	2	1	2	-	1	-	4	-	-	11	-	-	13	-	3	8	4	1	-	-	-	-	-	-	-	-	-	-	23	36	36
Total-----	3	49	94	29	3	57	1	43	1	16	741	1	1	741	17	263	579	75	20	12	297	2	8	187	7	2	96	2	1,567	2,308	2,308	

1/ No nonfatal injuries were reported at nonmetal mines and mills for the States not listed.

TABLE B-10. - Injuries by general work location and main cause at nonmetal mines and mills in the United States, by degree of injury and mineral industry, 1971

Degree of injury and mineral industry	Underground mines																
	Underground															Total, underground	
	Falls of roof or back	Falls of face or side	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Suffocation (no flame or smoldering)	Miscellaneous causes		Pneumoconiosis
Fatal and nonfatal:																	
Clay-----	1	3	-	2	5	1	1	-	5	-	1	-	2	-	-	-	21
Gypsum-----	1	-	-	-	2	-	-	-	1	-	-	-	-	-	-	-	4
Phosphate rock-----	2	-	-	1	6	1	-	-	1	-	-	-	1	-	-	-	12
Potash-----	9	1	6	11	39	7	3	2	20	-	-	3	6	1	4	-	112
Salt-----	3	1	5	18	32	7	4	-	23	-	-	3	13	-	4	-	113
Miscellaneous nonmetals--	21	-	6	19	37	6	1	2	14	1	1	-	11	8	3	1	131
Total-----	37	5	17	51	121	22	9	4	64	1	2	6	33	9	11	1	393
Fatal:																	
Clay-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gypsum-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phosphate rock-----	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Potash-----	2	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	3
Salt-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals--	-	-	-	-	-	-	-	-	-	-	1	-	-	7	-	-	8
Total-----	3	-	-	-	-	-	-	-	-	-	1	-	1	7	-	-	12
Permanent total:																	
Clay-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gypsum-----	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Phosphate rock-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potash-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Salt-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total-----	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Permanent partial:																	
Clay-----	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Gypsum-----	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Phosphate rock-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potash-----	-	-	-	-	1	-	-	-	1	-	-	1	1	-	-	-	4
Salt-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals--	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2
Total-----	1	-	-	-	2	-	-	-	3	-	-	1	1	-	-	-	8
Temporary total:																	
Clay-----	1	3	-	2	5	1	1	-	4	-	1	-	2	-	-	-	20
Gypsum-----	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2
Phosphate rock-----	1	-	-	1	6	1	-	-	1	-	-	-	1	-	-	-	11
Potash-----	7	1	6	11	38	7	3	2	19	-	-	2	4	1	4	-	105
Salt-----	3	1	5	18	32	7	4	-	23	-	-	3	13	-	4	-	113
Miscellaneous nonmetals--	20	-	6	19	36	6	1	2	14	1	-	-	11	1	3	1	121
Total-----	32	5	17	51	119	22	9	4	61	1	1	5	31	2	11	1	372

TABLE B-10. - Injuries by general work location and main cause at nonmetal mines and mills in the United States, by degree of injury and mineral industry, 1971 - Continued

Degree of injury and mineral industry	Underground mines - continued												Open pit mines											
	Surface											Total, underground mines												
	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery	Suffocation (no flame or smoldering)	Miscellaneous causes	Total, surface		Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Haulage	Electricity	Machinery	Fires or suffocation from fires	Miscellaneous causes	Total, open pit	
Fatal and nonfatal:																								
Clay-----	1	1	1	1	1	1	1	1	1	1	21	1	27	46	11	24	1	27	1	9	147			
Gypsum-----	1	1	1	1	1	1	1	1	1	1	4	3	3	1	2	2	2	2	2	11				
Phosphate rock-----	1	1	1	1	1	1	1	1	1	1	12	7	9	6	1	8	2	2	2	35				
Potash-----	7	12	2	3	1	3	1	4	1	4	33	145	1	1	1	1	1	1	1	1				
Salt-----	4	8	1	1	1	3	1	4	3	3	25	138	1	1	1	1	1	1	1	1				
Miscellaneous nonmetals--	1	5	1	1	1	3	1	1	1	3	5	136	2	12	35	11	2	24	14	5	105			
Total-----	11	25	3	4	1	6	1	4	1	7	63	456	3	49	94	29	3	58	1	45	1	16	299	
Fatal:																								
Clay-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Gypsum-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Phosphate rock-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Potash-----	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1		
Salt-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Miscellaneous nonmetals--	1	1	1	1	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1		
Total-----	1	1	1	1	1	1	1	1	1	1	12	1	1	1	1	1	1	2	1	1	1	3		
Permanent total::																								
Clay-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Gypsum-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Phosphate rock-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Potash-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Salt-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Miscellaneous nonmetals--	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Total-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Permanent partial:																								
Clay-----	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	4		
Gypsum-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Phosphate rock-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Potash-----	1	2	1	1	1	1	1	1	1	2	6	1	1	1	1	1	1	1	1	1	1	1		
Salt-----	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Miscellaneous nonmetals--	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1	2		
Total-----	1	2	1	1	1	1	1	1	1	3	11	1	1	2	1	3	1	2	1	1	1	9		
Temporary total:																								
Clay-----	1	1	1	1	1	1	1	1	1	1	20	1	27	44	10	24	1	25	1	9	142			
Gypsum-----	1	1	1	1	1	1	1	1	1	1	2	3	3	1	2	2	1	2	1	10				
Phosphate rock-----	1	1	1	1	1	1	1	1	1	1	11	7	9	6	1	7	2	2	1	33				
Potash-----	7	10	2	3	1	3	1	4	1	4	31	136	1	1	1	1	1	1	1	1				
Salt-----	4	8	1	1	1	2	1	4	3	3	24	137	1	1	1	1	1	1	1	1				
Miscellaneous nonmetals--	1	5	1	1	1	1	1	1	1	3	5	126	2	12	35	11	2	20	13	5	100			
Total-----	11	23	3	4	1	5	1	4	1	7	60	432	3	49	92	28	3	53	1	41	1	15	286	

TABLE B-10. - Injuries by general work location and main cause at nonmetal mines and mills in the United States, by degree of injury and mineral industry, 1971 - Continued

Degree of injury and mineral industry	Other surface mining		Total, mining activities	Mills														Grand total	
	Handling material	Total, other surface mining		Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires	Miscellaneous causes	Pneumoconiosis		Total, mills
Fatal and nonfatal:																			
Clay-----	-	-	168	12	165	407	46	12	7	238	2	6	141	4	1	71	1	1,113	1,281
Gypsum-----	-	-	15	-	9	13	1	2	-	6	-	-	5	-	-	1	-	37	52
Phosphate rock-----	-	-	47	-	9	16	2	-	-	5	-	1	6	-	-	2	-	41	88
Potash-----	-	-	145	1	2	5	1	-	1	2	-	-	2	-	-	1	-	15	160
Salt-----	1	1	140	2	9	13	-	-	-	9	-	-	2	-	-	-	-	35	175
Miscellaneous nonmetals--	-	-	241	2	69	125	25	6	4	40	-	1	37	3	1	21	1	335	576
Total-----	1	1	756	17	263	579	75	20	12	300	2	8	193	7	2	96	2	1,576	2,332
Fatal:																			
Clay-----	-	-	1	-	-	-	-	-	-	2	-	-	5	-	-	-	-	7	8
Gypsum-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phosphate rock-----	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	2
Potash-----	-	-	3	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	4
Salt-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals--	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
Total-----	-	-	15	-	-	-	-	-	-	3	-	-	6	-	-	-	-	9	24
Permanent total:																			
Clay-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1
Gypsum-----	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	2
Phosphate rock-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potash-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Salt-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals--	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Total-----	-	-	2	-	-	-	-	-	-	-	-	-	1	-	-	-	1	2	4
Permanent partial:																			
Clay-----	-	-	5	-	2	9	-	-	-	1	-	1	15	-	-	-	-	28	33
Gypsum-----	-	-	2	-	-	1	-	-	-	1	-	-	-	-	-	-	-	2	4
Phosphate rock-----	-	-	2	-	-	3	-	-	-	-	-	-	1	-	-	-	-	4	6
Potash-----	-	-	6	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	7
Salt-----	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Miscellaneous nonmetals--	-	-	4	-	-	3	1	-	-	2	-	-	3	-	-	-	1	10	14
Total-----	-	-	20	-	2	16	1	-	-	5	-	1	19	-	-	-	1	45	65
Temporary total:																			
Clay-----	-	-	162	12	163	398	46	12	7	235	2	5	121	4	1	71	-	1,077	1,239
Gypsum-----	-	-	12	-	9	12	1	2	-	5	-	-	4	-	-	1	-	34	46
Phosphate rock-----	-	-	44	-	9	13	2	-	-	4	-	1	5	-	-	2	-	36	80
Potash-----	-	-	136	1	2	5	1	-	1	1	-	-	1	-	-	1	-	13	149
Salt-----	1	1	139	2	9	13	-	-	-	9	-	-	2	-	-	-	-	35	174
Miscellaneous nonmetals--	-	-	226	2	69	122	24	6	4	38	-	1	34	3	1	21	-	325	551
Total-----	1	1	719	17	261	563	74	20	12	292	2	7	167	7	2	96	-	1,520	2,239

TABLE B-11. - Injury experience and worktime data by general work location at nonmetal mines and mills in the United States, by mineral industry, 1971 - Continued

Mineral industry	Man-days worked										Man-hours worked						Grand total
	/																
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills		
	Underground	Surface	Total						Underground	Surface	Total						
Clay-----	40,288	6,191	46,479	808,387	-	854,866	3,914,132	4,768,998	328,637	50,814	379,451	6,659,694	-	7,039,145	31,537,528	38,576,673	
Gypsum-----	64,599	21,698	86,297	136,362	-	222,659	461,931	684,590	524,304	173,666	697,970	1,126,156	-	1,824,126	3,698,559	5,522,685	
Phosphate rock-----	28,200	3,904	32,104	619,174	-	651,278	604,035	1,255,313	225,600	256,832	4,987,860	3,987,860	-	5,264,992	4,834,649	10,079,341	
Potash-----	319,166	117,968	437,134	-	-	437,134	206,948	644,082	2,553,326	943,744	3,497,070	1,655,587	-	3,622,571	1,655,587	5,152,657	
Salt-----	308,490	122,086	430,576	6,403	14,895	451,874	203,936	655,810	2,470,954	981,224	3,452,196	51,224	119,151	3,622,571	1,631,782	5,254,353	
Miscellaneous nonmetals-----	314,722	62,038	376,760	525,671	6,119	908,550	1,535,330	2,443,880	2,527,401	498,486	3,025,887	4,252,488	48,955	7,327,330	12,364,924	19,692,254	
Total-----	1,075,465	333,885	1,409,350	2,095,997	21,014	3,526,361	6,926,372	10,452,733	8,630,222	2,679,184	11,309,406	17,077,422	168,106	28,554,934	55,723,029	84,277,963	

TABLE B-12. - Injury experience and worktime data by general work location at miscellaneous nonmetal mines and mills in the United States, by mineral industry, 1971

Mineral industry	Fatal						Nonfatal						Grand total				
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines		Other surface mining	Total mining activities		
	Underground	Surface	Total						Underground	Surface	Total						
Injuries																	
Asbestos-----	1	-	1	-	1	1	1	1	-	1	4	-	5	8	13		
Barite-----	-	-	-	-	1	18	1	1	-	19	14	-	33	30	63		
Boron minerals-----	-	-	-	-	-	-	-	-	-	-	22	-	22	69	91		
Feldspar-----	-	-	-	-	-	-	-	-	-	-	6	-	6	18	24		
Fluorspar-----	7	7	14	-	7	58	1	59	1	59	3	-	60	16	76		
Magnesite-----	-	-	-	-	-	-	-	-	-	-	3	-	3	23	26		
Mica-----	-	-	-	-	-	-	-	-	-	-	-	-	-	6	6		
Pumice-----	-	-	-	-	-	-	-	-	-	-	8	-	8	23	31		
Sodium compounds-----	-	-	-	-	-	2	-	2	-	2	-	-	2	4	6		
Talc, soapstone, and pyrophyllite-----	-	-	-	-	-	23	2	25	2	25	11	-	36	54	90		
Other nonmetals 1/-----	-	-	-	-	1	21	1	22	1	22	34	-	56	84	140		
Total-----	8	-	8	2	10	123	5	128	103	335	566	-	231	335	566		

1/ Not elsewhere classified.

TABLE B-12. - Injury experience and worktime data by general work location at miscellaneous nonmetal mines and mills in the United States, by mineral industry, 1971 - Continued

Mineral industry	Fatal										Nonfatal									
	Underground mines					Open pit mines					Underground mines					Open pit mines				
	Surface		Total			Other surface mining		Total			Surface		Total			Other surface mining		Total		
	Underground	Surface	Underground	Surface	Total	Underground	Surface	Underground	Surface	Total	Underground	Surface	Underground	Surface	Total	Underground	Surface	Underground	Surface	Total
Frequency rates per million man-hours																				
Asbestos-----	30.58	-	23.64	-	-	-	3.31	-	0.94	-	30.58	-	23.64	-	15.42	-	16.57	-	10.49	12.22
Barite-----	-	-	-	-	-	-	1.29	-	.49	-	129.09	33.78	112.40	-	23.04	-	42.49	-	24.01	31.10
Boron minerals-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55.72	-	55.59	-	59.20	58.28
Feldspar-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.44	-	20.44	-	20.05	20.15
Fluorspar-----	8.66	-	7.57	-	-	-	7.19	-	4.41	-	71.72	8.61	63.79	-	20.65	-	61.64	-	26.13	47.93
Magnesite-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.91	-	35.91	-	53.52	50.65
Mica-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.78	-	10.78	-	9.04	9.04
Pumice-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.96	-	19.96	-	74.21	43.61
Sodium compounds-----	-	-	-	-	-	-	-	-	-	-	2.44	-	2.03	-	-	-	2.00	-	2.31	2.20
Talc, soapstone, and pyrophyllite-----	-	-	-	-	-	-	-	-	-	-	71.87	25.55	62.77	-	32.51	-	48.87	-	33.71	38.49
Other nonmetals 1/-----	-	-	-	-	-	-	.44	-	.19	-	56.17	9.92	46.35	-	19.45	-	24.78	-	27.58	26.39
Combined rate-----	3.17	-	2.64	-	-	-	1.36	-	.51	-	48.67	10.03	42.30	-	24.22	-	31.53	-	27.09	28.74
Severity rates per million man-hours																				
Asbestos-----	183,464	-	141,831	-	-	-	19,884	-	5,639	-	703	-	544	-	23,227	-	20,046	-	140	5,786
Barite-----	-	-	-	-	-	-	7,726	-	2,982	-	2,732	203	2,289	-	867	-	1,177	-	871	1,888
Boron minerals-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	320	-	320	-	1,810	1,810
Feldspar-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	355	-	355	-	3,772	2,921
Fluorspar-----	51,933	-	45,409	-	-	-	43,150	-	26,489	-	2,134	189	1,890	-	103	-	1,801	-	781	1,407
Magnesite-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,927	-	1,927	-	2,196	2,153
Mica-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,566	2,989
Pumice-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	374	-	374	-	643	2,664
Sodium compounds-----	-	-	-	-	-	-	-	-	-	-	107	-	89	-	-	-	88	-	276	208
Talc, soapstone, and pyrophyllite-----	-	-	-	-	-	-	-	-	-	-	1,737	664	1,526	-	1,005	-	1,287	-	636	841
Other nonmetals 1/-----	-	-	-	-	-	-	2,655	-	1,131	-	786	99	640	-	2,242	-	1,869	-	1,598	1,713
Combined rate-----	18,992	-	15,863	-	-	-	8,189	-	3,047	-	1,214	181	1,044	-	2,692	-	1,993	-	1,348	1,588
Average men working daily																				
Active operations										Average days active										
Underground mines	Open pit mines	Other surface mining	Total mining activities			Mills	Underground mines			Open pit mines	Other surface mining	Total mining activities			Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities
			Underground	Surface	Total		Underground	Surface	Total			Underground	Surface	Total						
4	12	-	16	4	18	7	14	15	29	146	-	164	411	555	517	294	221	-	229	270
2	43	-	45	74	119	41	74	15	89	322	-	411	232	411	1,016	234	232	-	232	256
1	1	-	1	3	4	3	3	3	6	137	-	143	20	143	586	20	360	-	346	329
2	75	-	77	18	95	16	18	-	18	182	-	200	367	567	567	199	177	-	179	304
34	16	-	50	382	441	58	382	59	441	58	-	499	247	746	746	262	104	-	244	310
2	2	-	2	3	5	3	3	-	3	40	-	72	251	251	251	-	261	-	261	255
1	49	-	50	22	72	22	22	3	25	69	-	72	512	512	324	93	182	-	178	273
4	1	-	134	332	337	33	332	65	397	2	-	332	180	512	1,042	-	153	-	153	215
20	66	-	86	32	118	32	152	36	188	212	-	400	709	709	1,109	258	197	-	226	274
28	204	-	234	67	301	67	176	55	231	1,035	13	1,279	1,247	1,247	2,526	257	208	-	218	304
96	603	4	703	242	1,391	242	1,154	237	1,391	2,535	18	3,944	5,252	5,252	9,196	271	207	340	230	292
Total or average-----																				

1/ Not elsewhere classified.

TABLE B-13. - Injury experience and worktime data by general work location at clay mines and mills in the United States, by State, 1971 - Continued

State	Fatal				Nonfatal								
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total					
	Underground	Surface	Total						Underground mines				
									Underground	Surface	Total		
Frequency rates per million man-hours													
Alabama-----	-	-	-	0.93	0.69	-	-	-	34.85	-	34.85	16.74	21.41
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	172.65	112.41
Arkansas-----	-	-	-	-	-	-	-	-	16.65	-	16.65	50.33	48.11
California-----	-	-	-	-	-	-	-	-	63.32	-	63.32	62.91	62.75
Colorado-----	-	-	-	-	-	-	-	-	-	-	-	26.19	16.05
Connecticut-----	-	-	-	-	-	-	-	-	66.26	-	66.26	52.25	58.42
Delaware-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida-----	-	-	-	-	-	-	-	-	4.30	-	4.30	22.14	17.58
Georgia-----	-	-	-	.13	.11	-	-	-	21.12	-	21.12	27.31	26.29
Hawaii-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho-----	-	-	-	-	-	-	-	-	-	-	-	81.37	48.37
Illinois-----	-	-	-	-	-	-	-	-	7.66	-	7.66	42.34	38.89
Indiana-----	-	-	-	-	-	-	-	-	31.39	-	31.39	22.13	23.63
Iowa-----	-	-	-	-	-	-	-	-	35.31	-	35.31	95.20	86.57
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	67.19	59.22
Kentucky-----	-	-	-	-	-	-	-	-	55.25	-	55.25	33.76	39.61
Louisiana-----	-	-	-	-	-	-	-	-	20.32	-	20.32	52.75	39.99
Maine-----	-	-	-	-	-	-	-	-	34.20	-	34.20	160.86	105.20
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	35.21	27.36
Massachusetts-----	-	-	-	-	-	-	-	-	-	-	-	111.78	101.84
Michigan-----	-	-	-	-	-	-	-	-	30.06	-	30.06	20.79	22.53
Minnesota-----	-	-	-	3.78	3.60	-	-	-	-	-	-	41.62	39.59
Mississippi-----	-	-	-	-	-	-	-	-	-	-	-	29.00	22.38
Missouri-----	-	-	-	-	-	-	-	-	24.14	-	24.14	38.82	31.96
Montana-----	-	-	-	-	-	-	-	-	-	-	-	46.17	29.16
Nebraska-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Nevada-----	-	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire-----	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey-----	-	-	-	3.59	3.19	-	-	-	-	-	-	61.04	54.27
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	16.28	15.09
New York-----	-	-	-	-	-	-	-	-	-	-	-	30.63	25.60
North Carolina-----	-	-	-	1.17	.98	-	-	-	22.07	-	22.07	41.36	38.35
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Oklahoma-----	-	-	-	-	.34	-	-	-	12.28	-	12.28	21.50	19.90
Oregon-----	-	-	-	-	-	-	-	-	40.29	-	40.29	60.28	58.29
Pennsylvania-----	-	-	-	-	-	-	-	-	-	-	-	15.97	9.24
South Carolina-----	-	-	-	-	-	-	-	-	-	-	-	39.42	39.20
South Dakota-----	-	-	-	7.53	6.06	-	-	-	19.03	-	19.03	38.45	40.04
Tennessee-----	-	-	-	-	-	-	-	-	26.75	-	26.75	42.26	40.04
Texas-----	-	-	-	-	-	-	-	-	62.41	-	62.41	67.75	66.71
Utah-----	-	-	-	-	-	-	-	-	34.83	-	34.83	19.32	22.26
Vermont-----	-	-	-	-	-	-	-	-	18.93	-	18.93	41.60	38.80
Virginia-----	-	-	-	-	-	-	-	-	13.46	-	13.46	56.10	44.02
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia-----	-	-	-	-	-	-	-	-	-	-	-	12.86	12.94
Wisconsin-----	-	-	-	-	-	-	-	-	-	-	-	14.99	13.64
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined rate-----	-	-	-	.22	.21	-	63.90	-	21.92	-	23.72	35.07	33.00

TABLE B-13. - Injury experience and worktime data by general work location at clay mines and mills in the United States, by State, 1971 - Continued

State	Active operations		Average men working daily						Average days active						
	Mines	Mills	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills
			Underground	Surface	Total										
Alabama-----	49	25	-	-	-	207	-	207	488	695	-	215	-	215	271
Arizona-----	9	2	-	-	-	31	-	31	35	66	-	188	-	188	310
Arkansas-----	20	10	-	-	-	50	-	50	396	446	-	139	-	139	270
California-----	60	26	6	-	6	158	-	164	438	602	80	123	-	283	283
Colorado-----	52	7	15	-	15	133	-	148	215	215	181	189	-	285	285
Connecticut-----	4	1	-	-	-	9	-	9	22	31	-	3	-	143	143
Delaware-----	1	1	-	-	-	1	-	1	1	2	-	3	-	3	313
District of Columbia-----	1	1	-	-	-	104	-	104	270	374	-	273	-	273	317
Florida-----	17	7	-	-	-	657	-	657	2,950	3,607	-	275	-	275	275
Georgia-----	65	36	-	-	-	1	-	1	4	5	-	130	-	130	243
Hawaii-----	1	1	-	-	-	1	-	1	28	50	-	143	-	143	165
Idaho-----	10	2	-	-	-	22	-	22	556	635	-	205	-	205	285
Illinois-----	28	24	-	-	-	79	-	79	222	281	54	205	-	202	280
Indiana-----	30	12	1	-	1	58	-	59	222	281	-	220	-	202	243
Iowa-----	16	16	-	-	-	48	-	48	258	306	-	116	-	116	263
Kansas-----	21	7	-	-	-	63	-	63	212	275	-	166	-	166	264
Kentucky-----	44	10	-	-	-	149	-	149	252	401	-	307	-	307	261
Louisiana-----	12	7	-	-	-	60	-	60	109	169	-	141	-	141	265
Maine-----	6	1	-	-	-	26	-	26	19	45	-	200	-	200	252
Maryland-----	12	9	-	-	-	30	-	30	85	115	-	237	-	237	280
Massachusetts-----	3	2	-	-	-	7	-	7	64	71	-	154	-	154	270
Michigan-----	9	7	-	-	-	92	-	92	267	359	-	141	-	141	256
Minnesota-----	6	6	-	-	-	12	-	12	129	141	-	183	-	183	266
Mississippi-----	34	23	-	-	-	158	-	158	372	530	-	202	-	202	285
Missouri-----	56	7	-	-	-	151	-	151	125	276	-	169	-	169	254
Montana-----	10	4	-	-	-	28	-	28	32	60	-	244	-	244	236
Nebraska-----	5	3	-	-	-	7	-	7	4	11	-	73	-	73	-
Nevada-----	7	2	3	-	3	9	-	12	-	25	275	6	-	6	265
New Hampshire-----	2	2	-	-	-	2	-	2	23	25	-	262	-	262	-
New Jersey-----	8	8	-	-	-	27	-	27	154	181	-	159	-	159	226
New Mexico-----	7	4	-	-	-	11	-	11	61	72	-	111	-	111	252
New York-----	11	10	-	-	-	83	-	83	266	349	-	184	-	184	289
North Carolina-----	48	27	-	-	-	173	-	173	922	1,095	-	225	-	225	230
North Dakota-----	2	1	-	-	-	4	-	4	11	15	-	22	-	22	110
Ohio-----	101	45	18	4	22	259	-	281	1,211	1,492	255	192	-	197	258
Oklahoma-----	15	9	-	-	-	31	-	31	232	263	-	208	-	208	242
Oregon-----	14	8	-	-	-	34	-	34	40	74	-	177	-	177	196
Pennsylvania-----	70	42	3	-	3	211	-	282	824	1,066	256	214	-	225	267
Rhode Island-----	23	23	-	-	-	144	-	144	734	878	-	221	-	221	265
South Carolina-----	5	3	-	-	-	16	-	16	65	81	-	209	-	209	255
South Dakota-----	22	20	-	-	-	120	-	120	458	578	-	225	-	225	265
Tennessee-----	91	45	-	-	-	179	-	179	1,153	1,332	-	132	-	132	275
Texas-----	14	14	50	-	51	42	-	112	298	340	167	195	-	195	296
Utah-----	18	13	-	-	-	30	-	30	1	31	-	98	-	98	152
Virginia-----	12	12	-	-	-	9	-	46	115	161	266	215	-	256	218
West Virginia-----	6	5	30	7	37	6	-	6	12	18	-	91	-	91	170
Wisconsin-----	2	2	-	-	-	134	-	134	308	442	-	214	-	214	274
Wyoming-----	31	14	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average-----	1,111	540	184	25	209	3,923	-	4,132	14,308	18,440	222	206	-	207	274

TABLE B-13. - Injury experience and worktime data by general work location at clay mines and mills in the United States, by State, 1971 - Continued

State	Man-days worked					Man-hours worked				
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Underground mines			Total mining activities
	Underground	Surface	Total				Underground	Surface	Total	
Alabama-----	-	-	-	44,509	-	44,509	-	-	373,035	373,035
Arizona-----	-	-	-	5,843	-	5,843	-	-	1,075,119	1,075,119
Arkansas-----	-	-	-	6,951	-	6,951	-	-	86,880	86,880
California-----	483	-	-	19,674	-	19,674	-	-	133,443	133,443
Colorado-----	2,709	-	-	9,292	-	12,001	3,864	-	854,436	854,436
Connecticut-----	-	-	-	1,697	-	1,697	21,674	-	161,788	161,788
Delaware-----	-	-	-	313	-	313	-	-	937,848	937,848
Florida-----	-	-	-	28,436	-	28,436	-	-	152,747	152,747
Georgia-----	-	-	-	180,797	-	180,797	-	-	249,293	249,293
Hawaii-----	-	-	-	130	-	130	-	-	19,140	19,140
Idaho-----	-	-	-	3,143	-	3,143	-	-	2,504	2,504
Illinois-----	-	-	-	16,216	-	16,216	-	-	232,585	232,585
Indiana-----	54	-	-	11,873	-	11,873	-	-	1,468,063	1,468,063
Iowa-----	-	-	-	10,358	-	10,358	-	-	8,320	8,320
Kansas-----	-	-	-	7,313	-	7,313	-	-	25,158	25,158
Kentucky-----	-	-	-	24,762	-	24,762	-	-	130,490	130,490
Louisiana-----	-	-	-	18,392	-	18,392	-	-	95,567	95,567
Maine-----	-	-	-	3,655	-	3,655	-	-	504,190	504,190
Maryland-----	-	-	-	6,002	-	6,002	-	-	58,100	58,100
Massachusetts-----	-	-	-	1,662	-	1,662	-	-	199,099	199,099
Michigan-----	-	-	-	14,135	-	14,135	-	-	187,646	187,646
Minnesota-----	-	-	-	8,493	-	8,493	-	-	29,240	29,240
Mississippi-----	-	-	-	28,877	-	28,877	-	-	48,914	48,914
Missouri-----	-	-	-	30,536	-	30,536	-	-	133,057	133,057
Montana-----	-	-	-	4,739	-	4,739	-	-	13,564	13,564
Nebraska-----	-	-	-	1,707	-	1,707	-	-	234,600	234,600
Nevada-----	826	-	-	525	-	525	-	-	248,536	248,536
New Hampshire-----	-	-	-	4,298	-	4,298	-	-	37,914	37,914
New Jersey-----	-	-	-	1,216	-	1,216	-	-	13,218	13,218
New Mexico-----	-	-	-	15,244	-	15,244	-	-	7,855	7,855
New York-----	-	-	-	38,916	-	38,916	-	-	4,200	4,200
North Carolina-----	-	-	-	86	-	86	-	-	36,756	36,756
North Dakota-----	-	-	-	49,609	-	49,609	-	-	122,844	122,844
Ohio-----	4,595	1,023	5,618	6,457	-	6,457	36,760	8,184	3,728	3,728
Oklahoma-----	-	-	-	5,483	-	5,483	-	-	1,165	1,165
Oregon-----	238	-	-	41,343	-	41,343	-	-	317,268	317,268
Pennsylvania-----	15,014	3,152	18,166	31,824	-	31,824	-	-	2,511,960	2,511,960
South Carolina-----	-	-	-	3,343	-	3,343	-	-	49,678	49,678
South Dakota-----	-	-	-	26,953	-	26,953	-	-	62,637	62,637
Tennessee-----	-	-	-	44,753	-	44,753	-	-	520,143	520,143
Texas-----	-	-	-	9,287	-	9,287	-	-	1,775,793	1,775,793
Utah-----	8,346	193	8,539	8,210	-	8,210	-	-	261,680	261,680
Virginia-----	-	-	-	2,931	-	2,931	-	-	1,561,719	1,561,719
Washington-----	-	-	-	1,935	-	1,935	-	-	32,047	32,047
West Virginia-----	8,023	1,823	9,846	28,673	-	28,673	-	-	229,672	229,672
Wisconsin-----	-	-	-	545	-	545	-	-	369,777	369,777
Wyoming-----	-	-	-	28,673	-	28,673	-	-	142,612	142,612
Total-----	40,288	6,191	46,479	808,387	-	854,866	328,637	50,814	379,451	7,039,145
									6,659,694	31,537,528
										38,576,673

TABLE 8-14. - Injury experience and worktime data by general work location at gypsum mines and mills in the United States, by State, 1971 - Continued

State	Fatal					Nonfatal									
	Underground mines			Open pit mines	Mills	Grand total	Underground mines			Open pit mines	Total mining activities	Mills	Grand total		
	Underground	Surface					Total	Underground	Surface					Total	
Severity rates per million man-hours															
Arizona-----	-	-	-	-	-	-	-	-	-	112	-	-	-	-	
Arkansas-----	-	-	-	-	-	-	-	-	-	2,280	-	-	41,189	25	
California-----	-	-	-	-	-	-	-	-	-	6,111	-	-	-	24,656	
Colorado-----	-	-	-	-	-	-	-	-	-	-	-	-	-	713	
Idaho-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Indiana-----	-	-	-	-	-	97	-	-	78	-	78	-	1,853	1,644	
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Louisiana-----	-	-	-	-	-	-	-	-	-	283	-	-	565	6	
Michigan-----	-	-	-	-	-	-	-	-	-	72	-	-	954	405	
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	432	373	
Nevada-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
New York-----	-	-	-	-	-	-	-	8,086	-	5,584	-	-	180	4,371	
Ohio-----	-	-	-	-	-	-	-	339	271	-	200	-	135	135	
Oklahoma-----	-	-	-	-	-	-	-	-	72	-	72	-	200	149	
Texas-----	-	-	-	-	-	-	-	-	1,776	-	-	-	1,776	593	
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Virginia-----	-	-	-	-	-	-	-	53,204	-	42,563	-	-	-	42,563	
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	-	138	121	
Combined rate-----	-	-	-	-	-	-	-	14,343	-	10,774	642	-	2,155	2,936	
Average men working daily															
Active operations		Underground mines					Open pit mines			Grand total			Average days active		
Mines	Mills	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total	Mills	
5	3	-	-	-	-	-	-	21	58	79	153	-	153	243	
3	1	-	-	-	-	-	-	50	174	224	268	-	268	281	
10	7	-	-	-	-	-	-	45	66	111	274	-	274	282	
4	6	-	-	-	-	-	-	17	62	79	143	-	143	297	
2	-	-	-	-	-	-	-	2	-	2	156	-	156	-	
1	-	35	8	43	-	-	-	43	248	291	260	-	260	338	
5	5	14	3	17	71	-	-	88	41	129	273	-	273	313	
3	2	15	8	23	23	-	-	29	111	143	263	-	263	293	
1	2	-	-	-	-	-	-	23	111	134	288	-	288	285	
5	24	5	5	26	72	-	-	98	60	158	266	-	266	277	
1	1	4	-	4	-	-	-	4	2	6	273	-	273	324	
3	3	3	-	3	27	-	-	30	189	219	293	-	293	266	
2	-	-	-	-	5	-	-	5	-	5	251	-	251	266	
3	3	81	35	116	-	-	-	116	32	148	281	-	281	304	
2	2	16	4	20	8	-	-	28	15	43	300	-	291	260	
7	3	-	-	-	73	-	-	73	106	179	274	-	274	301	
6	6	-	-	-	74	-	-	74	147	221	260	-	260	286	
4	2	-	-	-	18	-	-	18	66	84	191	-	191	294	
1	1	54	13	67	-	-	-	67	8	75	263	-	263	-	
1	1	-	-	-	2	-	-	2	3	5	45	-	45	250	
3	4	-	-	-	15	-	-	15	88	103	250	-	250	320	
75	58	243	76	319	529	-	-	848	1,582	2,430	258	-	263	292	
Total or average-----															
Average men working daily		Underground mines					Open pit mines			Grand total			Average days active		
Mines	Mills	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total	Mills	
5	3	-	-	-	-	-	-	21	58	79	153	-	153	243	
3	1	-	-	-	-	-	-	50	174	224	268	-	268	281	
10	7	-	-	-	-	-	-	45	66	111	274	-	274	282	
4	6	-	-	-	-	-	-	17	62	79	143	-	143	297	
2	-	-	-	-	-	-	-	2	-	2	156	-	156	-	
1	-	35	8	43	-	-	-	43	248	291	260	-	260	338	
5	5	14	3	17	71	-	-	88	41	129	273	-	273	313	
3	2	15	8	23	23	-	-	29	111	143	263	-	263	293	
1	2	-	-	-	-	-	-	23	111	134	288	-	288	285	
5	24	5	5	26	72	-	-	98	60	158	266	-	266	277	
1	1	4	-	4	-	-	-	4	2	6	273	-	273	324	
3	3	3	-	3	27	-	-	30	189	219	293	-	293	266	
2	-	-	-	-	5	-	-	5	-	5	251	-	251	266	
3	3	81	35	116	-	-	-	116	32	148	281	-	281	304	
2	2	16	4	20	8	-	-	28	15	43	300	-	291	260	
7	3	-	-	-	73	-	-	73	106	179	274	-	274	301	
6	6	-	-	-	74	-	-	74	147	221	260	-	260	286	
4	2	-	-	-	18	-	-	18	66	84	191	-	191	294	
1	1	54	13	67	-	-	-	67	8	75	263	-	263	-	
1	1	-	-	-	2	-	-	2	3	5	45	-	45	250	
3	4	-	-	-	15	-	-	15	88	103	250	-	250	320	
75	58	243	76	319	529	-	-	848	1,582	2,430	258	-	263	292	
Total or average-----															

TABLE B-15. - Injury experience and worktime data by general work location at phosphate rock mines and mills in the United States, by State, 1971 - Continued

State	Fatal					Nonfatal										
	Underground mines		Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	
	Underground	Surface						Total	Underground	Surface						Total
Frequency rates per million man-hours																
California-----	-	-	-	-	-	0.24	0.13	-	-	-	6.91	-	-	8.28	7.62	
Florida-----	-	-	-	-	-	-	-	-	-	-	4.84	-	-	17.13	5.90	
Idaho-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.66	
Montana-----	-	-	-	-	-	-	-	45.79	-	-	40.77	-	-	-	9.72	
North Carolina-----	-	-	-	-	-	-	-	-	-	-	20.15	-	-	-	9.59	
Tennessee-----	-	-	-	-	-	-	-	-	-	-	7.79	-	-	-	12.48	
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45.04	
Utah-----	34.44	-	27.72	-	7.86	-	5.13	68.87	-	-	-	-	-	15.72	10.26	
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	-	-	12.50	9.45	
Combined rate-----	4.43	-	3.89	-	.19	.21	.20	48.76	-	-	7.02	-	-	8.77	8.53	
Severity rates per million man-hours																
California-----	-	-	-	-	-	1.461	762	-	-	-	517	-	-	1,041	791	
Florida-----	-	-	-	-	-	-	-	-	-	-	19	-	-	857	91	
Idaho-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,358	
Montana-----	-	-	-	-	-	-	-	1,847	-	-	1,644	-	-	-	233	
North Carolina-----	-	-	-	-	-	-	-	-	-	-	483	-	-	2,253	1,019	
Tennessee-----	-	-	-	-	-	-	-	-	-	-	249	-	-	-	901	
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	55	36	
Utah-----	206,612	-	166,297	-	47,156	-	30,787	241	-	-	194	-	-	244	184	
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Combined rate-----	26,596	-	23,362	-	1,144	1,241	1,191	1,640	-	-	425	-	-	981	718	
Average men working daily																
Active operations					Average men working daily							Average days active				
Mines	Mills	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	
		Underground	Surface	Total												
California-----	1	-	-	-	3	-	3	-	3	-	267	-	-	267	-	
Florida-----	27	24	-	-	1,551	-	1,551	1,556	3,107	-	303	-	-	303	330	
Idaho-----	4	-	-	-	318	-	318	35	237	-	237	-	-	237	205	
Montana-----	1	-	-	-	110	-	110	21	251	-	251	-	-	251	277	
North Carolina-----	1	-	-	-	68	-	68	73	365	-	365	-	-	365	365	
Tennessee-----	25	-	-	-	141	-	141	64	205	-	213	-	-	213	310	
Texas-----	6	-	-	-	39	-	39	10	106	-	199	-	-	199	278	
Utah-----	6	-	33	8	41	-	80	26	110	-	292	-	-	158	325	
Wyoming-----	2	-	-	-	41	-	41	76	117	-	158	-	-	158	263	
Total or average-----	67	38	131	20	151	2,161	-	2,312	1,861	4,173	213	-	-	282	325	

TABLE B-16. - Injury experience and worktime data by general work location at potash mines and mills in the United States, by State, 1971 - Continued

State	Active operations		Average men working daily								Average days active							
			Underground mines				Open pit mines				Grand total		Underground mines		Open pit mines		Grand total	
	Mines	Mills	Underground	Surface	Total	Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills	Grand total		
New Mexico-----	8	9	894	329	1,223	-	-	1,223	578	1,801	357	-	-	357	358			
Total or average-----	8	9	894	329	1,223	-	-	1,223	578	1,801	357	-	-	357	358			
Man-days worked																		
Man-hours worked																		
Underground mines			Open pit mines	Other surface mining	Total mining	Mills	Grand total	Underground mines				Open pit mines	Other surface mining	Total mining activities	Mills	Grand total		
								Underground	Surface	Total	Underground						Surface	Total
319,166			117,968	437,134	-	-	437,134	206,948	644,082	2,553,326	943,744	3,497,070	-	-	3,497,070	1,655,587	5,152,657	
319,166			117,968	437,134	-	-	437,134	206,948	644,082	2,553,326	943,744	3,497,070	-	-	3,497,070	1,655,587	5,152,657	
Total-----																		

TABLE B-17. - Injury experience and worktime data by general work location at salt mines and mills in the United States, by State, 1971

State	Fatal							Nonfatal						
	Underground mines				Open pit mines			Underground mines				Open pit mines		
	Underground		Surface		Total		Grand total	Underground		Surface		Grand total	Underground	
	Underground	Surface	Underground	Surface	Total	Grand total		Underground	Surface	Total	Grand total		Underground	Surface
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Louisiana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Michigan-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New York-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE B-17. - Injury experience and worktime data by general work location at salt mines and mills in the United States, by State, 1971 - Continued

State	Active operations		Average men working daily										Average days active							
	Mines	Mills	Underground mines				Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills	Grand total			
			Underground		Total	Surface												Underground mines		
			Underground	Surface														Underground	Surface	Total
California-----	5	4	-	-	-	20	17	37	22	59	-	-	259	234	248	260	276			
Kansas-----	4	3	42	10	52	-	10	62	47	109	262	-	-	-	36*	279	267			
Louisiana-----	13	5	329	122	451	-	9	460	323	783	287	-	-	-	35*	288	283			
Michigan-----	1	1	110	59	169	-	-	169	41	210	268	-	-	-	-	268	260			
Nevada-----	1	1	-	-	-	-	-	-	-	4	-	-	30	-	-	30	-			
New Mexico-----	1	3	-	-	-	-	5	5	74	79	-	-	-	170	170	328	-			
New York-----	2	3	274	152	426	-	-	426	25	451	254	-	-	-	-	254	238			
Ohio-----	3	1	299	74	373	-	-	373	34	407	324	-	-	-	-	324	262			
Texas-----	3	2	34	15	49	-	13	62	167	229	257	-	-	-	248	255	257			
Utah-----	3	3	4	1	5	-	-	12	6	18	120	-	157	-	-	142	250			
Total or average-----	36	25	1,092	433	1,525	31	54	1,610	739	2,349	282	207	276	281	-	-	276			
			Man-days worked										Man-hours worked							
Underground	Underground mines		Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total					
	Underground	Surface						Underground	Surface	Total										
California-----	-	-	5,183	3,981	9,164	5,731	14,895	-	-	-	41,464	31,848	73,312	45,848	119,160					
Kansas-----	11,017	2,619	-	-	13,636	12,572	29,858	88,136	20,952	109,088	-	29,200	138,288	100,576	238,864					
Louisiana-----	93,803	35,569	-	-	129,372	91,440	224,000	735,830	284,556	1,020,386	-	-	1,045,886	731,519	1,777,405					
Michigan-----	30,250	15,045	-	-	45,295	10,660	55,955	230,086	129,074	379,160	960	25,500	379,160	85,280	464,440					
Nevada-----	-	-	120	-	120	-	120	-	-	-	-	-	960	-	960					
New Mexico-----	-	-	-	850	850	24,252	25,102	-	-	-	-	6,798	6,798	194,020	200,818					
New York-----	69,291	38,737	-	-	108,028	5,953	113,981	563,872	305,732	869,604	-	-	869,604	47,438	917,042					
Ohio-----	94,889	26,144	-	-	121,033	8,919	129,952	759,110	209,152	968,262	-	-	968,262	71,330	1,039,612					
Texas-----	8,760	3,852	-	3,226	15,838	42,969	58,807	70,080	30,816	100,896	-	-	126,701	34,351	141,047					
Utah-----	480	120	1,100	-	1,700	1,500	3,200	3,840	960	4,800	8,800	25,805	13,600	12,000	25,600					
Total-----	308,490	122,086	6,403	14,895	451,874	203,996	655,870	2,470,954	981,242	3,452,196	51,224	119,151	3,622,571	1,631,782	5,254,353					

TABLE B-18. - Injury experience and worktime data by general work location at miscellaneous nonmetal mines and mills in the United States, by State, 1971 - Continued

State	Active operations		Average men working daily						Average days active						
	Mines	Mills	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills
			Underground	Surface	Total										
Alabama-----	3	2	-	-	-	14	-	14	47	61	-	255	-	255	266
Alaska-----	1	1	-	-	-	10	-	10	3	13	-	260	-	260	260
Arizona-----	39	9	14	4	18	85	-	103	36	139	294	163	-	186	209
Arkansas-----	15	6	74	15	89	25	-	114	167	281	234	144	-	215	319
California-----	98	36	50	17	67	447	5	519	1,454	1,973	245	244	286	244	319
Colorado-----	52	6	85	29	114	64	-	178	78	256	288	143	-	236	288
Connecticut-----	2	1	-	-	-	8	-	8	34	42	-	313	-	313	313
Florida-----	10	-	-	-	-	42	-	42	42	42	-	249	-	249	-
Georgia-----	13	5	19	4	23	54	-	77	193	270	209	270	-	252	308
Hawaii-----	18	4	-	-	-	60	-	60	14	74	-	92	-	92	200
Idaho-----	10	5	4	-	4	21	-	25	26	51	80	103	-	100	238
Illinois-----	22	6	179	21	200	37	-	237	167	404	271	148	-	252	317
Indiana-----	4	1	-	-	-	23	-	23	1	24	-	218	-	218	230
Iowa-----	3	-	-	-	-	37	-	37	-	37	-	228	-	228	-
Kansas-----	4	3	-	-	-	8	-	8	20	28	-	87	-	87	142
Kentucky-----	5	1	91	7	98	7	-	105	23	128	271	50	-	256	295
Louisiana-----	5	5	-	-	-	27	-	29	104	104	109	174	-	169	290
Maine-----	3	1	-	-	-	7	-	7	2	9	-	209	-	209	260
Maryland-----	1	-	-	-	-	2	-	2	-	2	-	75	-	75	-
Massachusetts-----	20	-	-	-	-	181	-	181	-	181	-	216	-	216	-
Michigan-----	8	1	-	-	-	61	-	61	3	64	-	92	-	92	330
Minnesota-----	19	20	-	-	-	217	-	217	216	433	-	239	-	239	248
Missouri-----	10	7	4	1	5	88	-	93	164	257	170	261	-	257	316
Montana-----	2	1	-	-	-	2	-	2	2	4	-	10	-	10	200
Nebraska-----	40	17	15	2	17	135	12	164	365	529	171	196	365	206	267
Nevada-----	2	1	-	-	-	2	-	2	9	11	-	10	-	10	314
New Hampshire-----	5	1	-	-	-	27	1	28	4	32	-	190	-	189	212
New Jersey-----	23	14	9	-	9	54	-	63	88	151	54	143	-	130	239
New Mexico-----	12	9	66	14	80	192	-	125	296	421	260	195	-	237	260
New York-----	38	26	26	1	27	1	-	1	511	730	229	243	-	241	301
North Carolina-----	1	-	-	-	-	20	-	20	-	20	-	41	-	41	-
North Dakota-----	11	-	-	-	-	31	-	31	8	39	-	107	-	107	-
Ohio-----	18	2	-	-	-	6	-	6	1	7	-	262	-	262	256
Oklahoma-----	5	1	-	-	-	59	-	59	5	64	-	40	-	40	100
Oregon-----	16	5	-	-	-	45	-	45	84	129	-	212	-	212	180
Pennsylvania-----	15	2	-	-	-	68	-	68	7	75	-	231	-	231	312
South Carolina-----	48	1	-	-	-	23	-	23	7	30	-	70	-	70	263
South Dakota-----	4	2	-	-	-	66	-	66	124	190	-	246	-	246	305
Tennessee-----	12	12	-	-	-	73	-	73	215	249	246	236	-	236	300
Texas-----	37	6	145	48	193	23	-	216	336	336	277	258	-	258	281
Utah-----	3	5	39	9	48	32	-	121	260	330	-	106	-	106	260
Vermont-----	16	9	-	-	-	70	-	70	29	61	-	135	-	135	288
Virginia-----	17	4	-	-	-	12	-	12	-	12	-	274	-	274	-
Washington-----	2	-	-	-	-	24	-	24	452	873	310	207	-	308	330
West Virginia-----	10	4	332	65	397	24	-	421	5,252	9,196	271	207	340	230	292
Wisconsin-----	703	242	1,154	237	1,391	2,535	18	3,944	5,252	9,196	271	207	340	230	292
Wyoming-----															
Total or average-----															

TABLE B-18. - Injury experience and worktime data by general work location at miscellaneous nonmetal mines and mills in the United States, by State, 1971 - Continued

State	Man-days worked					Man-hours worked					Mills	Grand total				
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines				Open pit mines	Other surface mining	Total mining activities	
	Underground	Surface	Total						Underground	Surface						Total
Alabama-----	-	-	-	3,565	-	3,565	12,509	16,074	-	-	-	31,491	100,076	131,567		
Alaska-----	-	-	-	2,600	-	2,600	780	3,380	-	-	-	20,800	6,240	27,040		
Arizona-----	4,088	1,200	5,288	13,822	-	19,110	7,539	26,649	32,704	9,600	42,304	111,366	217,790	217,790		
Arkansas-----	17,214	3,656	20,870	3,604	-	24,474	35,950	60,424	139,440	29,600	169,040	288,335	290,554	488,429		
California-----	12,502	3,910	16,412	108,867	1,429	126,708	464,178	590,886	100,025	31,271	131,296	871,854	3,713,427	4,728,009		
Colorado-----	24,580	8,294	32,874	9,182	-	42,056	22,465	64,521	196,639	66,349	262,988	69,362	179,720	512,070		
Connecticut-----	-	-	-	2,504	-	2,504	10,642	13,146	-	-	-	20,032	85,136	105,168		
Florida-----	-	-	-	10,464	-	10,464	40,464	10,464	-	-	-	81,836	-	81,836		
Georgia-----	4,000	800	4,800	14,573	-	19,373	59,506	78,879	40,000	8,000	48,000	115,817	506,215	670,032		
Hawaii-----	-	-	-	5,514	-	5,514	2,793	8,307	-	-	-	43,597	22,348	65,945		
Idaho-----	320	-	320	2,169	-	2,489	6,175	8,664	2,560	16,175	2,560	17,353	50,198	70,111		
Illinois-----	49,517	4,721	54,238	5,462	-	59,700	52,910	112,610	396,148	37,768	433,916	46,993	423,283	904,192		
Indiana-----	-	-	-	5,008	-	5,008	230	5,238	-	-	-	39,920	1,840	41,760		
Iowa-----	-	-	-	8,427	-	8,427	-	8,427	-	-	-	68,645	-	68,645		
Kansas-----	-	-	-	698	-	698	2,837	3,535	-	-	-	5,448	23,759	29,207		
Kentucky-----	24,799	1,736	26,535	349	-	26,884	30,120	33,669	198,370	13,888	212,258	2,790	54,280	269,328		
Louisiana-----	-	-	-	4,697	-	-	4,915	4,915	1,747	-	1,747	37,578	240,958	280,358		
Maine-----	218	-	218	1,462	-	1,462	520	1,982	-	-	-	11,396	4,160	15,556		
Maryland-----	-	-	-	1,500	-	1,500	-	1,500	-	-	-	1,200	-	1,200		
Massachusetts-----	-	-	-	39,139	-	39,139	-	39,139	-	-	-	339,258	-	339,258		
Michigan-----	-	-	-	5,613	-	5,613	990	6,603	-	-	-	42,306	7,920	30,226		
Minnesota-----	-	-	-	51,917	-	51,917	53,489	105,406	-	-	-	419,648	430,180	849,828		
Missouri-----	-	-	-	23,861	-	23,861	51,837	75,698	5,440	1,360	6,800	181,221	414,895	606,116		
Montana-----	680	170	850	20	-	20	400	420	-	-	-	120	2,400	2,520		
Nebraska-----	-	-	-	26,418	-	26,418	97,487	131,345	19,030	4,000	23,030	214,920	784,627	1,058,900		
Nevada-----	2,400	500	2,900	20	-	20	2,826	2,846	-	-	-	160	22,608	22,768		
New Hampshire-----	-	-	-	5,133	-	5,133	850	6,133	-	-	-	41,069	6,800	49,069		
New Jersey-----	-	-	-	7,702	-	7,702	20,998	29,190	3,920	-	3,920	60,557	171,428	235,905		
New Mexico-----	490	-	490	8,192	-	8,192	20,998	29,190	-	-	-	64,477	616,094	832,256		
New York-----	17,199	3,635	20,834	8,761	-	29,595	77,011	106,606	137,592	29,080	166,672	69,490	1,237,887	1,662,170		
North Carolina-----	5,860	313	6,173	46,631	-	52,804	133,876	206,660	46,880	2,504	49,384	374,899	-	324		
North Dakota-----	-	-	-	41	-	41	-	41	-	-	-	324	-	324		
Ohio-----	-	-	-	2,146	-	2,146	-	2,146	-	-	-	16,010	16,223	16,010		
Oklahoma-----	-	-	-	8,113	-	8,113	2,050	10,163	-	-	-	64,234	80,457	80,457		
Oregon-----	-	-	-	12,487	-	12,487	388	1,388	-	-	-	1,906	2,706	2,706		
Pennsylvania-----	-	-	-	10,409	-	10,409	26,246	36,555	-	-	-	97,837	7,219	105,056		
South Carolina-----	-	-	-	4,737	-	4,737	1,841	5,578	-	-	-	92,000	210,813	302,813		
South Dakota-----	-	-	-	5,841	-	5,841	1,212	7,073	-	-	-	35,765	14,733	50,498		
Tennessee-----	-	-	-	13,848	-	13,848	30,945	44,793	-	-	-	48,000	18,928	66,928		
Texas-----	-	-	-	2,876	-	2,876	9,917	60,355	299,969	80,774	380,743	22,530	256,358	367,862		
Utah-----	37,464	10,098	47,562	2,876	-	50,438	9,917	60,355	80,774	20,802	106,500	143,658	403,252	483,525		
Vermont-----	10,736	2,569	13,305	17,792	-	31,097	60,496	91,593	85,698	20,802	106,500	146,999	492,417	742,575		
Virginia-----	-	-	-	18,093	-	18,093	67,704	85,797	-	-	-	26,750	545,236	692,235		
Washington-----	-	-	-	3,382	-	3,382	8,339	11,721	-	-	-	12,960	66,711	93,461		
Wisconsin-----	-	-	-	1,620	-	1,620	-	1,620	-	-	-	12,960	-	12,960		
Wyoming-----	102,655	20,436	123,091	6,566	-	129,657	148,955	278,612	821,239	163,490	984,729	58,850	1,194,081	2,237,660		
Total-----	314,722	62,038	376,760	525,671	6,119	908,550	1,535,330	2,443,880	2,527,401	498,486	3,025,887	4,255,488	12,364,924	19,692,254		

TABLE B-19. - Injury experience and worktime data by general work location at nonmetal mines and mills in the United States, by State, 1971 - Continued

State	Fatal					Nonfatal											
	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	Underground mines			Open pit mines	Other surface mining	Total mining activities	Mills	Grand total	
	Underground	Surface	Total						Underground	Surface	Total						
Frequency rates per million man-hours																	
Alabama-----	-	-	-	-	-	-	0.85	0.63	-	-	-	32.14	-	-	32.14	17.02	20.89
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	30.58	-	23.64	-	-	4.43	-	2.04	30.58	-	-	10.89	23.64	-	13.28	68.27	42.90
Arkansas-----	-	-	-	-	-	-	-	-	129.09	33.78	-	10.19	112.40	-	57.48	33.80	38.42
California-----	-	-	-	-	-	-	-	-	48.13	31.98	-	33.65	44.39	23.11	34.38	40.43	39.10
Colorado-----	-	-	-	-	-	-	-	-	18.32	-	-	18.33	14.05	-	15.61	22.92	19.39
Connecticut-----	-	-	-	-	-	-	-	-	-	-	-	56.94	-	-	56.94	19.18	28.69
Delaware-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida-----	-	-	-	-	-	-	.21	.11	-	-	-	7.11	-	-	7.11	10.24	8.80
Georgia-----	-	-	-	-	-	-	.13	.10	25.00	-	-	20.83	20.83	-	20.83	27.33	26.22
Hawaii-----	-	-	-	-	-	-	-	-	-	-	-	44.81	-	-	44.81	32.61	39.84
Idaho-----	-	-	-	1.50	-	1.50	-	1.23	-	-	-	4.51	-	-	4.51	55.00	13.53
Illinois-----	17.67	-	16.13	-	-	11.45	-	3.16	73.20	-	-	16.90	66.83	-	52.34	36.78	41.07
Indiana-----	-	-	-	-	-	-	-	-	13.82	-	-	22.19	11.16	-	17.79	11.12	12.19
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	9.72	-	-	8.64	79.10	53.45
Kansas-----	-	-	-	-	-	-	-	-	16.66	26.35	-	59.44	18.98	-	11.39	40.05	33.11
Kentucky-----	-	-	-	-	-	-	-	-	115.94	72.00	-	19.94	113.07	-	86.93	30.64	53.92
Louisiana-----	-	-	-	-	-	-	-	-	55.72	21.09	-	29.93	46.06	-	24.78	160.86	32.23
Maine-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.17	75.57	75.57
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.37	25.55	25.55
Massachusetts-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	111.78	101.07	101.07
Michigan-----	-	-	-	-	-	-	-	-	20.49	35.59	-	23.97	25.38	-	24.55	32.68	28.04
Minnesota-----	-	-	-	-	-	-	3.67	3.05	-	-	-	-	-	-	40.41	33.53	33.53
Mississippi-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.00	22.38	22.38
Missouri-----	-	-	-	1.50	-	1.50	-	.72	-	-	-	26.94	-	-	35.04	31.12	31.12
Montana-----	-	-	-	-	-	-	-	-	47.45	-	-	31.48	42.32	-	37.07	39.49	38.37
Nebraska-----	-	-	-	-	-	-	-	-	-	-	-	21.45	64.87	-	-	-	-
Nevada-----	-	-	-	-	-	-	-	-	74.55	-	-	-	-	-	23.07	28.63	27.37
New Hampshire-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.77	13.87	13.87
New Jersey-----	-	-	-	-	-	-	3.50	2.76	-	-	-	13.19	-	-	12.98	63.09	52.44
New Mexico-----	1.17	-	.86	-	-	.84	.47	.70	42.62	34.97	-	15.67	40.56	-	39.58	11.19	28.96
New York-----	-	-	-	-	-	-	.63	.49	34.95	16.75	-	20.21	29.12	-	27.81	27.66	27.66
North Carolina-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.15	23.68	23.68
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	-	-	-	.67	-	.24	45.55	17.63	-	11.35	39.58	-	31.30	23.71	26.48
Oklahoma-----	-	-	-	2.27	-	-	-	-	-	-	-	24.97	-	-	44.46	39.00	39.00
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.77	13.77	13.77
Pennsylvania-----	-	-	-	-	-	-	-	-	103.36	-	-	17.18	85.37	-	33.98	39.26	37.90
South Carolina-----	-	-	-	-	-	-	6.78	4.64	-	-	-	25.45	-	-	25.45	38.93	36.68
South Dakota-----	-	-	-	-	-	-	-	-	-	-	-	29.49	-	-	29.49	60.98	51.07
Tennessee-----	-	-	-	-	-	-	-	-	-	-	-	20.58	-	-	18.93	19.45	19.45
Texas-----	-	-	-	-	-	-	-	-	28.54	64.90	-	19.98	39.64	-	21.87	34.08	31.90
Utah-----	2.50	-	2.04	-	-	1.40	-	.94	72.57	11.07	-	4.46	61.23	-	43.40	8.47	31.82
Vermont-----	-	-	-	-	-	-	-	-	140.03	48.07	-	13.92	122.07	-	59.96	18.28	32.32
Virginia-----	-	-	-	-	-	-	-	-	8.87	-	-	13.66	7.09	-	11.09	12.85	12.85
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.58	23.94	23.94
West Virginia-----	-	-	-	-	-	-	-	-	15.58	-	-	-	12.70	-	10.73	14.99	13.64
Wisconsin-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming-----	-	-	-	-	-	-	-	-	2.44	-	-	26.46	2.03	-	9.28	10.13	9.81
Combined rate-----	1.39	-	1.06	.18	-	.53	.16	.28	44.15	23.51	5.95	17.33	39.26	-	25.95	28.12	27.39

TABLE B-19. - Injury experience and worktime data by general work location at nonmetal mines and mills in the United States, by State, 1971 - Continued

State	Active operations			Average men working daily							Average days active					
	Under-ground mines	Surface mines	Mills	Underground mines			Open pit mines	Other surface	Total mining activities	Mills	Grand total	Underground mines	Open pit mines	Other surface mining	Total mining activities	Mills
				Underground	Surface	Total										
Alabama-----	~	52	27	-	-	-	221	-	221	535	756	-	218	-	218	270
Alaska-----	-	1	1	-	-	-	10	-	10	3	13	-	260	-	260	260
Arizona-----	4	49	14	14	4	18	137	-	155	129	284	294	167	-	182	252
Arkansas-----	2	36	17	74	15	89	125	-	214	737	951	234	192	-	210	255
California-----	12	166	73	56	17	73	673	22	768	1,980	2,748	231	218	246	220	305
Colorado-----	12	96	19	100	29	129	214	-	343	207	550	276	98	-	165	290
Connecticut-----	~	6	2	-	-	-	17	-	17	56	73	-	247	-	247	247
Delaware-----	-	1	1	-	-	-	1	-	1	2	2	-	313	-	313	313
Florida-----	-	54	31	-	-	-	1,697	-	1,697	1,826	3,523	-	300	-	300	327
Georgia-----	5	73	41	19	4	23	711	-	734	3,143	3,877	209	275	-	273	314
Hawaii-----	-	19	5	-	-	-	61	-	61	18	79	-	93	-	93	213
Idaho-----	1	24	9	4	-	4	363	-	367	89	456	80	223	-	221	202
Illinois-----	15	35	30	179	21	200	116	-	316	723	1,039	271	187	-	240	272
Indiana-----	3	33	15	36	8	44	81	-	125	471	596	255	208	-	225	310
Iowa-----	1	23	21	14	3	17	156	-	173	299	472	285	246	-	250	252
Kansas-----	5	27	15	57	18	75	77	10	162	393	555	263	125	365	204	270
Kentucky-----	4	45	11	91	7	98	156	-	254	275	529	271	161	-	203	266
Louisiana-----	5	21	19	329	122	451	83	9	543	647	1,190	287	301	354	290	281
Maine-----	1	10	1	2	-	2	53	-	55	19	74	109	158	-	156	245
Maryland-----	-	15	10	-	-	-	37	-	37	87	124	-	202	-	202	252
Massachusetts-----	-	4	2	-	-	-	9	-	9	64	73	-	201	-	201	280
Michigan-----	3	32	13	131	64	195	345	-	540	368	908	267	210	-	231	270
Minnesota-----	-	7	14	-	-	-	73	-	73	132	205	-	100	-	100	258
Mississippi-----	-	34	23	-	-	-	158	-	158	372	530	-	183	-	183	264
Missouri-----	-	75	27	-	-	-	368	-	368	341	709	-	224	-	224	261
Montana-----	3	19	13	106	13	119	116	-	235	219	454	248	239	-	244	303
Nebraska-----	-	7	4	-	-	-	9	-	9	6	15	-	192	-	192	224
Nevada-----	6	47	20	21	2	23	175	12	210	554	764	164	197	365	204	267
New Hampshire-----	-	4	3	-	-	-	4	-	4	32	36	-	136	-	136	265
New Jersey-----	-	13	9	-	-	-	54	1	55	158	213	-	175	150	174	226
New Mexico-----	12	29	30	903	329	1,232	70	5	1,307	801	2,108	355	145	170	343	334
New York-----	10	19	25	421	201	622	128	-	750	619	1,369	260	188	-	247	274
North Carolina-----	4	83	54	26	1	27	433	-	460	1,506	1,966	229	235	-	243	260
North Dakota-----	-	3	1	-	-	-	5	-	5	11	16	-	23	-	23	110
Ohio-----	6	110	48	333	82	415	287	-	702	1,260	1,962	320	188	-	266	258
Oklahoma-----	-	40	14	-	-	-	135	-	135	346	481	-	236	-	236	280
Oregon-----	1	18	9	3	-	3	270	-	273	41	1,171	79	213	-	213	260
Pennsylvania-----	8	78	44	58	13	71	189	-	189	819	1,007	256	223	-	223	270
South Carolina-----	-	59	26	-	-	-	84	-	84	186	256	-	96	-	96	255
South Dakota-----	-	51	28	-	-	-	284	-	284	529	813	-	221	-	221	271
Tennessee-----	2	111	66	34	15	49	319	13	381	1,601	1,982	257	244	248	246	273
Utah-----	28	36	15	232	58	290	148	-	438	146	336	211	190	-	204	303
Vermont-----	3	3	5	39	9	48	73	-	121	215	336	277	244	-	257	281
Virginia-----	1	32	22	54	13	67	112	-	179	558	737	263	235	-	245	279
Washington-----	-	6	6	-	-	-	64	-	64	33	97	-	100	-	100	280
West Virginia-----	2	4	5	30	7	37	9	-	46	115	161	266	125	-	256	218
Wisconsin-----	-	4	2	-	-	-	18	-	18	12	30	-	120	-	120	170
Wyoming-----	4	42	23	332	65	397	214	-	611	924	1,535	310	212	-	276	305
Total or average-----	163	1,837	912	3,698	1,120	4,818	9,179	72	14,069	24,320	38,389	293	228	292	251	285

TABLE B-20. - Injury experience and worktime data on offieworkers at nonmetal mines and mills in the United States, by mineral industry, 1971

Mineral industry	Injuries			Frequency rates per million man-hours			Severity rates per million man-hours			Average men working daily	Average days active	Man-days worked	Man-hours worked
	Fatal	Nonfatal	Total	Fatal	Nonfatal	Total	Fatal	Nonfatal	Total				
Clay-----	-	7	7	-	2.24	2.24	-	9	9	1,519	257	390,047	3,118,446
Gypsum-----	-	-	-	-	-	-	-	-	-	244	260	63,543	506,275
Phosphate rock-----	-	-	-	-	-	-	-	-	-	251	256	64,161	513,343
Potash-----	-	-	-	-	-	-	-	-	-	159	267	42,490	339,919
Salt-----	-	1	1	-	2.03	2.03	-	36	36	243	257	62,360	493,277
Sulfur-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous nonmetals-----	-	-	-	-	-	-	-	-	-	945	252	237,957	1,898,843
Total or average-----	-	8	8	-	1.16	1.16	-	7	7	3,361	256	860,558	6,870,103

TABLE B-21. - Injury experience and worktime data on offieworkers at nonmetal mines and mills in the United States, by State, 1971

State	Injuries			Frequency rates per million man-hours			Severity rates per million man-hours			Average men working daily	Average days active	Man-days worked	Man-hours worked
	Fatal	Nonfatal	Total	Fatal	Nonfatal	Total	Fatal	Nonfatal	Total				
Alabama-----	-	1	1	-	10.53	10.53	-	105	105	47	261	12,249	94,988
Arizona-----	-	1	1	-	24.06	24.06	-	72	72	25	210	5,251	41,568
Arkansas-----	-	-	-	-	-	-	-	-	-	76	259	19,674	157,389
California-----	-	-	-	-	-	-	-	-	-	325	253	82,152	654,038
Colorado-----	-	-	-	-	-	-	-	-	-	45	222	9,993	77,324
Connecticut-----	-	-	-	-	-	-	-	-	-	3	289	868	6,940
Florida-----	-	-	-	-	-	-	-	-	-	220	259	57,061	456,845
Georgia-----	-	1	1	-	1.01	1.01	-	1	1	476	262	124,793	992,599
Hawaii-----	-	-	-	-	-	-	-	-	-	4	279	1,117	8,938
Idaho-----	-	-	-	-	-	-	-	-	-	30	235	7,039	56,315
Illinois-----	-	-	-	-	-	-	-	-	-	68	287	19,533	157,204
Indiana-----	-	-	-	-	-	-	-	-	-	56	259	14,479	115,811
Iowa-----	-	1	1	-	9.75	9.75	-	10	10	47	272	12,799	102,575
Kansas-----	-	-	-	-	-	-	-	-	-	41	267	10,948	85,173
Kentucky-----	-	-	-	-	-	-	-	-	-	33	257	68,492	544,366
Louisiana-----	-	-	-	-	-	-	-	-	-	119	254	30,167	241,340
Maine-----	-	-	-	-	-	-	-	-	-	3	182	565	4,648
Maryland-----	-	-	-	-	-	-	-	-	-	18	216	3,893	33,771
Massachusetts-----	-	-	-	-	-	-	-	-	-	5	298	1,490	11,920
Michigan-----	-	-	-	-	-	-	-	-	-	70	249	17,464	134,860
Minnesota-----	-	-	-	-	-	-	-	-	-	11	261	2,867	22,932
Mississippi-----	-	-	-	-	-	-	-	-	-	43	253	10,894	87,930
Missouri-----	-	-	-	-	-	-	-	-	-	43	245	10,525	83,407
Montana-----	-	1	1	-	8.75	8.75	-	35	35	53	270	14,289	114,255
Nebraska-----	-	-	-	-	-	-	-	-	-	4	288	1,153	8,974
Nevada-----	-	-	-	-	-	-	-	-	-	93	253	23,573	188,471
New Hampshire-----	-	-	-	-	-	-	-	-	-	1	276	276	2,205
New Jersey-----	-	-	-	-	-	-	-	-	-	21	174	3,661	26,888
New Mexico-----	-	-	-	-	-	-	-	-	-	187	265	49,611	395,887
New York-----	-	1	1	-	2.81	2.81	-	51	51	175	255	44,605	355,551
North Carolina-----	-	1	1	-	3.63	3.63	-	29	29	140	244	34,180	275,364
North Dakota-----	-	-	-	-	-	-	-	-	-	1	125	125	1,000
Ohio-----	-	-	-	-	-	-	-	-	-	161	261	41,968	338,176
Oklahoma-----	-	-	-	-	-	-	-	-	-	52	238	12,363	96,239
Oregon-----	-	-	-	-	-	-	-	-	-	4	204	817	6,451
Pennsylvania-----	-	-	-	-	-	-	-	-	-	87	250	21,786	174,166
South Carolina-----	-	-	-	-	-	-	-	-	-	72	261	18,757	152,508
South Dakota-----	-	-	-	-	-	-	-	-	-	7	300	2,100	16,800
Tennessee-----	-	-	-	-	-	-	-	-	-	47	254	11,931	97,133
Texas-----	-	1	1	-	3.09	3.09	-	3	3	157	257	40,350	323,921
Utah-----	-	-	-	-	-	-	-	-	-	36	239	8,615	68,720
Vermont-----	-	-	-	-	-	-	-	-	-	20	257	5,147	41,277
Virginia-----	-	-	-	-	-	-	-	-	-	63	259	16,342	130,783
Washington-----	-	-	-	-	-	-	-	-	-	3	173	519	4,048
West Virginia-----	-	-	-	-	-	-	-	-	-	9	243	2,188	17,504
Wisconsin-----	-	-	-	-	-	-	-	-	-	2	252	505	4,040
Wyoming-----	-	-	-	-	-	-	-	-	-	158	262	41,404	332,791
Total or average-----	-	8	8	-	1.16	1.16	-	7	7	3,361	256	860,558	6,870,103

Form 6-1430-A
(October 1968)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINESBudget Bureau No. 42-R1548.
Approval expires August 1971.INJURIES AND EMPLOYMENT
IN NONMETALLIC MINERAL MINES AND MILLS

(Please correct if name or address has changed.)

Section 13 of the Federal Metal and Nonmetallic Mine Safety Act (30 U.S.C. 721-740) requires the full and accurate reporting of the information requested on this form concerning accidents, injuries, and occupational diseases, and related data at your mineral extractive and milling or processing operation.

I. EMPLOYMENT AND INJURIES

1. EMPLOYMENT.—Report data for all men engaged in production, exploration, development, overburden removal, stockpile, construction, maintenance, and repair work—including supervisory and technical personnel at the operation. Include proprietors and firm members (owners, partners, or operators) performing manual labor or supervisory duties. Report separate data on all offeworkers at the operation.

DEPARTMENT	(a) Average Number of Men Working on Active Days	(b) Days Active During Year	(c) Total Man-Shifts Worked During Year	(d) Length of Shift (Hours)	(e) Total Man-Hours Worked During Year	(f) Summary of Work Injuries		(g) Production* (short tons)
						Fatal	Nonfatal	
AT UNDERGROUND MINE								
(01) Underground								
(02) Surface shops, yards, etc., at underground mines only								
AT OPEN-PIT MINE								
(03) Open-pit (including associated shops and yards)								
OTHER SURFACE MINING								
(07) Hydrauliclicking								
(08) Well, pond, pumping station, etc.								
AT MILL								
(30) Processing plants (include crushing, grinding, screening, flotation, other processing and associated shops and yards)								
AT OFFICE								
(00) Offeworkers (at mine and or mill)								

*Include production of nonmetallic (industrial) mineral extracted from mine, pit, well or other recovery operation.

Convert all units of measure to short tons or specify units reported: _____

2. How many mines _____ (number) and mills _____ (number) are included in the employment data? Give name(s) and location(s): _____

MINE NAME	COUNTY	STATE	MILL NAME	COUNTY	STATE
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

3. INJURIES. If you had NO DISABLING WORK INJURIES** during the year, check block ☐; otherwise, please complete column f, Summary of Work Injuries, above; also list them on the reverse side of this page.

**A DISABLING WORK INJURY is one which occurs in the course of and arises out of employment, irrespective of whether the injury is compensable and whether or not your establishment was operating on the days following the date of injury. The term "injury" includes occupational diseases. A disabling work injury is one which results in death or permanent impairment or which temporarily disables the worker for 1 full day or more after the day of injury (USAS Z16.1).

II. GENERAL

1. If any new or reopened mines or mills were operated in your vicinity during the past year, give names and addresses of owners or operators: _____

2. Have you subcontracted any of your operations during the reporting year? Yes ☐ No ☐

(a) If yes, is subcontractor's data included in this report? Yes ☐ No ☐ (b) If you subcontracted any of your operations, please furnish the following information:

Name and business address of the subcontractor(s): _____

(c) Effective date of subcontract(s): _____

(d) Name and exact location of the operations subcontracted: _____

Signature

Title

Date

(OVER)

GPO 846 - 332

INJURY DATA

List below every disabling work injury (see definition on front side of form) which occurred during the year to all classes of your employees included in the employment data. Write in a description of the accident and then fill in blocks above the description that are applicable to the accident.

CASE NO.	DEPARTMENT (List department in which accident occurred)	SOURCE OF INJURY (Object, substance, exposure, or bodily motion which directly produced or inflicted the injury, such as timber, chemicals, welder's flash, or lifting, respectively)	EXTENT OF DISABILITY (Please indicate the extent of disability by an entry in one of the columns below)			PART OF BODY INJURED (Be specific, such as great toe, left foot, lower arm, right hand, etc.)	NATURE OF INJURY (Amputation, bruise, strain, dermatitis, etc.)	
			Death (Enter a check-mark)	Permanent-total disability*	Permanent-partial disability (Please indicate percent loss and part of body affected)*			Temporary-total disability (Enter time lost in calendar days)
Example	Crusher	Rock				22	Left Shoulder	Broken bone
Describe the accident: Employee was barring down in hopper to free hung feed to crusher. Hang up moved suddenly and a large rock glanced off the bar and hit employee on left shoulder fracturing collar bone.								
1.								
Describe the accident:								
2.								
Describe the accident:								
3.								
Describe the accident:								
4.								
Describe the accident:								
5.								
Describe the accident:								
6.								
Describe the accident:								
7.								
Describe the accident:								
8.								
Describe the accident:								

* If more convenient, enter the time charge for each injury as established by the American Standards Association, in accordance with instructions from USAS Z16.1.

Form 6-1430-A
(October 1971)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINESBudget Bureau No. 42-R1548.
Approval expires August 1972.INJURIES AND EMPLOYMENT
IN NONMETALLIC MINERAL MINES AND MILLS

(Please correct if name or address has changed.)

Section 13 of the Federal Metal and Nonmetallic Mine Safety Act (30 U.S.C. 721-740) requires the full and accurate reporting of the information requested on this form concerning accidents, injuries, and occupational diseases, and related data at your mineral extractive and milling or processing operation.

I. EMPLOYMENT AND INJURIES

1. EMPLOYMENT.—Report data for all men engaged in production, exploration, development, overburden removal, stockpile, construction, maintenance, and repair work—including supervisory and technical personnel at the operation. Include proprietors and firm members (owners, partners, or operators) performing manual labor or supervisory duties. Report separate data on all offworkers at the operation.

DEPARTMENT	(a) Average Number of Men Working on Active Days	(b) Days Active During Year	(c) Total Man-Shifts Worked During Year	(d) Length of Shift (Hours)	(e) Total Man-Hours Worked During Year	(f) Summary of Work Injuries		(g) Production* (short tons)
						Fatal	Nonfatal	
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AT OPEN-PIT MINE								
(03) Open pit (including associated shops and yards)								
OTHER SURFACE MINING								
(07) Hydrauliclicking								
(08) Well, pond, pumping station, etc.								
AT MILL								
(30) Processing plants (include crushing, grinding, screening, flotation, other processing and associated shops and yards)								
AT OFFICE								
(00) Offworkers (at mine and or mill)								

*Include production of nonmetallic (industrial) mineral extracted from mine, pit, well or other recovery operation. Convert all units of measure to short tons or specify units reported: _____

2. How many mines _____ (number) and mills _____ (number) are included in the employment data? Give name(s) and location(s): _____

MINE NAME	COUNTY	STATE	MILL NAME	COUNTY	STATE
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

3. INJURIES. If you had NO DISABLING WORK INJURIES** during the year, check block ☐; otherwise, please complete column f, Summary of Work Injuries, above; also list them on the reverse side of this page.

**A DISABLING WORK INJURY is one which occurs in the course of and arises out of employment, irrespective of whether the injury is compensable and whether or not your establishment was operating on the days following the date of injury. The term "injury" includes occupational diseases. A disabling work injury is one which results in death or permanent impairment or which temporarily disables the worker for 1 full day or more after the day of injury (USAS-Z16.1).

II. GENERAL

1. If any new or reopened mines or mills were operated in your vicinity during the past year, give names and addresses of owners or operators _____

2. Have you subcontracted any of your operations during the reporting year? Yes ☐ No ☐

(a) If yes, is subcontractor's data included in this report? Yes ☐ No ☐ (b) If you subcontracted any of your operations, please furnish the following information:

Name and business address of the subcontractor(s) _____

(c) Effective date of subcontract(s) _____ (d) Name and exact location of the operations subcontracted _____

Signature _____	Title _____	Date _____
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(OVER)

GPO 838-546

INJURY DATA

List below every disabling work injury (see definition on front side of form) which occurred during the year to all classes of your employees included in the employment data. Write in a description of the accident and then fill in blocks above the description that are applicable to the accident.

CASE NO.	DEPARTMENT (List department in which accident occurred)	SOURCE OF INJURY (Object, substance, exposure, or bodily motion which directly produced or initiated the injury, and the nature of the injury, flash, or lifting, respectively)	EXTENT OF DISABILITY (Please indicate the extent of disability by an entry in one of the columns below)				PART OF BODY INJURED (Be specific, such as great toe, left foot, index finger, right hand, etc.)	NATURE OF INJURY (Amputation, bruise, strain, dermatitis, etc.)
			Death (Enter a checkmark)	Permanent-total disability *	Permanent-partial disability (Please indicate percent loss and part of body affected) *	Temporary-total disability (Enter time lost in calendar days)		
Example	Crusher	Rock					Left Shoulder	Broken bone
Describe the accident: Employee was barring down in hopper to free hung feed to crusher. Hang up moved suddenly and a large rock glanced off the bar and hit employee on left shoulder fracturing collar bone.								
1.								
Describe the accident:								
2.								
Describe the accident:								
3.								
Describe the accident:								
4.								
Describe the accident:								
5.								
Describe the accident:								
6.								
Describe the accident:								
7.								
Describe the accident:								
8.								
Describe the accident:								

* If more convenient, enter the time charge for each injury as established by the American Standards Association, in accordance with instructions from USAS 216.1.









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